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RIVERSIDE TEXTBOOKS IN EDUCATION

EDITED BY ELLWOOD P. CUBBERLEY
PROFESSOR OF EDUCATION
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A BRIEF
HISTORY OF EDUCATION

A HISTORY OF THE PRACTICE AND PROGRESS AND ORGANIZATION OF EDUCATION

BY

ELLWOOD P. CUBBERLEY
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PREFACE

The present volume is an abridgment and condensation of my *History of Education*, issued in 1920, and has been prepared to meet the needs of normal schools and colleges which desire to teach the general history of education, but which do not have the time or the inclination to go into the subject in such detail as is given in the larger volume above referred to. The general plan of the two books is the same.

Like the larger *History of Education*, the present volume is a history of the practice and progress and organization of education itself, rather than a history of educational theory, and presents the history of education as a phase of the history of the rise and development and spread of our Western civilization. As in the larger volume, I have tried here to present such a picture of the rise, struggle for existence, growth, and recent great expansion of the idea of the improvability of the race and the elevation and emancipation of the individual through education as would be most illuminating and useful to students of the subject. To this end I have traced the great forward steps in the emancipation of the intellect of man, and the efforts to perpetuate the progress made through the organization of educational institutions to pass on to others what had been attained.

To this end I have tried to hold to the main lines of the story, and have in consequence omitted reference to many theorists and reformers and events and schools which doubtless were important in their land and time, but the influence of which on the main current of educational progress was, after all, but small. For such omission I have no apology to make. In their place I have introduced a record of world events and forces, not included in the usual history of education, which to me seem important as having contributed materially to the shaping and directing of intellectual and educational progress. While in the treatment major emphasis has been given to modern times, I have nevertheless tried to show how all modern education has been after all a development, a culmination, a flowering-out of forces and impulses which go far back in history for their origin. In a civilization such as we of to-day enjoy, with roots so deeply embedded in the past as is ours, any adequate understanding of world practices and of present-day world problems in education calls for some tracing of development to give proper background and perspective. The rise of modern state schools systems, the variations in types found to-day in different lands, the new conceptions of the educational purpose, the rise of science study, the new functions which the school has recently assumed, the world-wide sweep of modern educational ideas, the rise of many entirely new types of schools and training within the past century — these and many other features of modern educational practice in progressive nations are better understood if viewed in the light of their proper historical setting.

As in the larger volume, chief dependence for supplemental reading has been placed on the companion volume of *Readings in the History of Education*, and these have been fully cross-referenced to (**R. 125; R. 216;** etc.) in the pages of the text. With a number of copies of the *Readings* available for reference work, this text could be used without other library equipment. Depending so largely on the companion volume for the necessary supplemental readings, the chapter bibliographies have in consequence been reduced to a very few of the more valuable and more commonly found references. On pages xv and xvi is also given a list of the more important general histories of education commonly found in normal-school and college libraries, and to these reference may be made, as desired, for still further supplemental reading. To add to the teaching value of the book, the same series of Questions for Discussion based on the text, appended to each of the chapters of the larger volume, has been retained in this briefer text. The teacher of this text will find that the possession of a copy of the larger volume will be very useful, by reason of the large amount of additional illustrative material it will supply.

ELLWOOD P. CUBBERLEY

Stanford University, Cal.
June 19, 1922

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GENERAL BIBLIOGRAPHY

In addition to the List of Readings and the Supplemental References given in the chapter bibliographies, the following works, not cited in the chapter bibliographies, will be found in most libraries and may be consulted, on all points to which they are likely to apply, for additional material:

I. GENERAL HISTORIES OF EDUCATION

1. Davidson, Thomas. *History of Education.* 292 pp. New York, 1900.

Good on the interpretation of the larger movements of history.

*2. Monroe, Paul. *Text Book in the History of Education.* 772 pp. New York, 1905.

Our most complete and scholarly history of educational theory. This volume should be consulted freely. See analytical table of contents.

3. Munroe, Jas. P. *The Educational Ideal.* 262 pp. Boston, 1895.

Contains very good short chapters on the educational reformers.

*4. Graves, F. P. *A History of Education.* 3 vols. New York, 1909–13.
Vol. I. *Before the Middle Ages.* 304 pp.
Vol. II. *During the Middle Ages.* 314 pp.
Vol. III. *In Modern Times.* 410 pp.

These volumes contain valuable supplementary material, and good chapter bibliographies.

5. Hart, J. K. *Democracy in Education.* 418 pp. New York, 1918.

An interpretation of educational progress.

6. Quick, R. H. *Essays on Educational Reformers.* 568 pp. 2d ed., New York, 1890.

A series of well-written essays on the work of the theorists in education since the time of the Renaissance.

*7. Parker, S. C. *The History of Modern Elementary Education.* 506 pp. Boston, 1912.

An excellent treatise on the development of the theory for our modern elementary school, with some good descriptions of modern practice.

II. GENERAL BIBLIOGRAPHIES OF EDUCATION

1. Cubberley, E. P. *Syllabus of Lectures on the History of Education.* 358 pp. New York. First ed., 1902; 2d ed., 1905.

Gives detailed and classified bibliographies for all phases of the subject. Now out of print, but may be found in most normal school and college libraries, and many public libraries.

III. CYCLOPÆDIAS

*1. Monroe, Paul, Editor. *Cyclopedia of Education.* 5 vols. New York, 1911–13.

The most important Cyclopædia of Education in print. Contains excellent articles on all historical points and events, with good selected bibliographies. A work that should be in all libraries, and freely consulted in using this Text. Its historical articles are too numerous to cite in the chapter bibliographies, but, due to the alphabetical arrangement and good cross-referencing, they may be found easily.

*2. Watson, Foster, Editor. *The Encyclopedia and Dictionary of Education.* 4 vols. London and New York, 1921–22.

The most recent Cyclopedia of Education, presenting recent contributions and changes, and outlining the educational systems of most world nations.

*3. *Encyclopædia Britannica.* 11th ed., 29 vols. Cambridge, 1910–11.

Contains numerous important articles on all types of historical topics, and excellent biographical sketches. Should be consulted freely in using this Text.

IV. MAGAZINES

*1. Barnard's *American Journal of Education.* Edited by Henry Barnard. 31 vols. Hartford, 1855–81. Reprinted, Syracuse, 1902. *Index* to the 31 vols. published by the United States Bureau of Education, Washington, 1892.

A wonderful mine of all kinds of historical and educational information, and should be consulted freely on all points relating to European or American educational history.

In the chapter bibliographies, as above, the most important references are indicated with an asterisk (*).

A BRIEF HISTORY OF EDUCATION

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PART I

THE ANCIENT WORLD

THE FOUNDATION ELEMENTS OF OUR WESTERN CIVILIZATION

GREECE — ROME — CHRISTIANITY

A BRIEF HISTORY OF EDUCATION

CHAPTER I

THE OLD GREEK EDUCATION

Introduction. The Civilization which we of to-day enjoy is a very complex thing, made up of many different contributions, some large and some small, from people in many different lands and different ages. To trace all these contributions back to their sources would be a task impossible of accomplishment, and, while specific parts would be interesting, for our purposes they would not be important. Especially would it not be profitable for us to attempt to trace the development of minor features, or to go back to the rudimentary civilizations of primitive peoples. The early development of civilization among the Chinese, the Hindoos, the Persians, the Egyptians, or the American Indians all alike present features which to some form a very interesting study, but our western civilization does not go back to these as sources, and consequently they need not concern us in the study we are about to begin.

The civilization which we now know and enjoy has come down to us from four main sources. The Greeks, the Romans, and the Christians laid the foundations, and in the order named, and the study of the early history of our western civilization is a study of the work and the blending of these three main forces. It is upon these three foundation stones, superimposed upon one another, that our modern European and American civilization has been developed. The Germanic tribes, overrunning the boundaries of the Roman Empire in the fourth and fifth centuries, added another new force of largest future significance, and one which profoundly modified all subsequent progress and development. To these four main sources we have made many additions in modern times, building an entirely new superstructure on the old foundations, but the groundwork of our civilization is composed of these four foundation elements. For these reasons a history of even modern education almost of necessity goes back briefly at least, to the work and contributions of these ancient peoples.

Starting, then, with the work of the Greeks, we shall state briefly the contributions to the stream of civilization which have come down to us from each of the important historic peoples or groups or forces, and shall trace the blending and assimilating processes of the centuries. While describing briefly the educational institutions and ideas of the different peoples, we shall be far less concerned, as we progress down the centuries, with the educational and philosophical theories advanced by thinkers among them than with what was actually done, and with the lasting contributions which they made to our educational practices and to our present-day civilization.

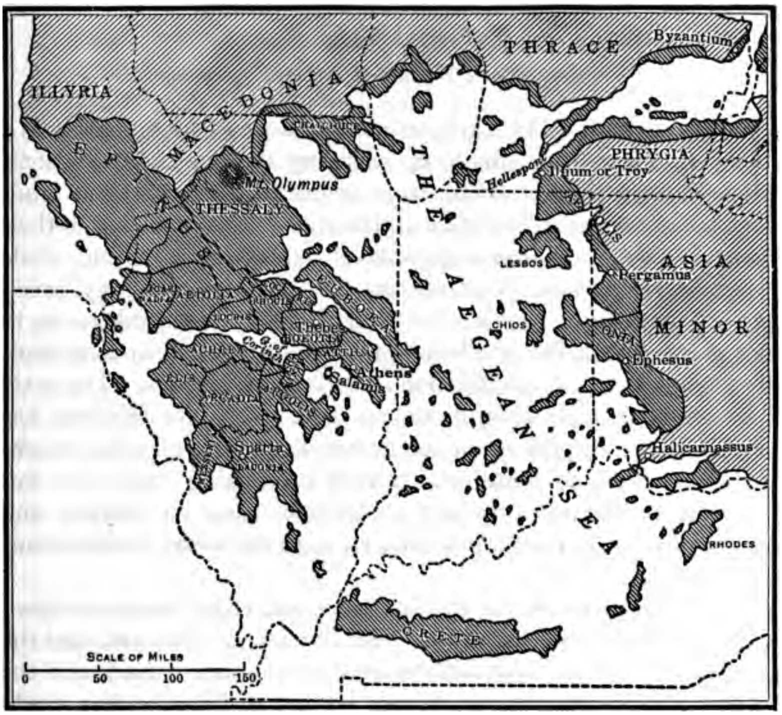

FIG. 1. ANCIENT GREECE AND THE ÆGEAN WORLD

Superimposed on the East-North-Central Group of American States, to show relative size. Dotted lines indicate the boundaries of the American States — Illinois, Indiana, Kentucky, etc. All of Greece will be seen to be a little less than half the size of the State of Illinois, the Ægean Sea about the size of the State of Indiana, and Attica not quite so large as two average-size Illinois counties.

I. GREECE AND ITS PEOPLE

The land. Ancient Greece, or Hellas as the Greeks called their homeland, was but a small country. The map just given shows the Ægean world superimposed on the States of the old Northwest Territory, from which it may be seen that the Greek mainland was a little less than half as large as the State of Illinois. Attica, where a most wonderful intellectual life arose and flourished for centuries, and whose contributions to civilization were the chief glory of Greece, was smaller than two average-size Illinois counties, and about two thirds the size of the little State of Rhode Island. The country was sparsely populated, except in a few of the City-States, and probably did not, at its most prosperous period, contain much more than a million and a half of people — citizens, foreigners, and slaves included.

The government. Politically, Greece was composed of a number of independent City-States of small size. They had been settled by early tribes, which originally held the land in common. Attica, with its approximately seven hundred square miles of territory, was an average-size City-State. The central city, the surrounding farming and grazing lands, and the coastal regions all taken together, formed the State, the citizens of which — city-residents, farmers, herdsmen, and fishermen — controlled the government. There were in all some twenty of these City-States in mainland Greece, the most important of which were Attica, of which Athens was the central city; Laconia, of which Sparta was the central city; and Bœotia, of which Thebes was the central city. Some of the States developed democracies, of which class Athens became the most notable example, while some were governed as oligarchies. Of all the different States but few played any conspicuous part in the history of Greece. Of these few Attica stands clearly above them all as the leader in thought and art and the most progressive in government. Here, truly, was a most wonderful people, and it is with Attica that the student of the history of education is most concerned. The best of all Greece was there.

The people. The Greeks were among the first of the European peoples to attain to any high degree of civilization. Their story runs back almost to the dawn of recorded history. As early as 3500 B.C. they were in an advanced stone age, and by 2500 B.C. had reached the age of bronze. The destruction of

Homer's Troy dates back to 1200 B.C., and the Homeric poems to 1100 B.C.

The lower part of the Greek peninsula, known as Laconia, was settled by the Dorian branch of the Greek family, a practical, forceful, but a wholly unimaginative people. Sparta was their most important city. To the north were the Ionic Greeks, a many-sided and a highly imaginative people. Athens was their chief city. In the settlement of Laconia the Spartans imposed themselves as an army of occupation on the original inhabitants, whom they compelled to pay tribute to them, and established a military monarchy in southern Greece. The people of Attica, on the other hand, absorbed into their own body the few earlier settlers of the Attic plain. They also established a monarchy, but, being a people more capable of progress, this later evolved into a democracy. The people of Attica were in consequence a somewhat mixed race, which possibly in part accounts for their greater intellectual ability and versatility.

Classes in the population. Greece, as was the ancient world in general, was built politically on the dominant power of a ruling class. In consequence, all of course could not become citizens of the State, even after a democracy had been evolved. Citizenship came with birth and proper education, and, before 509 B.C., foreigners were seldom admitted to privileges in the State. Only a male citizen might hold office, protect himself in the courts, own land, or attend the public assemblies. Only a citizen, too, could participate in the religious festivals and rites, for religion was an affair of the ruling families of the State.

Even more, citizenship everywhere in the earlier period was a degree to be attained to only after proper education and preliminary military and political training. This not only made some form of education necessary, but confined educational advantages to male youths of proper birth. There was of course no purpose in educating any others. Education in Greece was essentially the education of the children of the ruling class to perpetuate the rule of that class.

Beneath both citizens and foreign residents was a great foundation mass of working slaves, who rendered all types of menial and intellectual services. Sailors, household servants, field workers, clerks in shops and offices, accountants, and pedagogues were among the more common occupations of slaves in Greece. Many of these had been citizens and learned men of other City-States or countries, but had been carried off as captives in some war. This was a common practice in the ancient world, slavery being the lot of alien conquered people almost without exception.

Education, then, being only for the male children of citizens, and citizenship a degree to be attained to on the basis of education and training, let us next see in what that education consisted, and what were its most prominent characteristics and results.

II. EARLY EDUCATION IN GREECE

Some form of education that would train the son of the citizen for participation in the religious observances and duties of a citizen of the State, and would prepare the State for defense against outward enemies, was everywhere in Greece recognized as a public necessity, though its provision, nature, and extent varied in the different City-States. We have clear information only as to Sparta and Athens, and will consider only these two as types. Sparta is interesting as representing the old Greek tribal training, from which Sparta never progressed. Many of the other Greek City-States probably maintained a system of training much like that of Sparta. Such educational systems stand as undesirable examples of extreme state socialism, contributed little to our western civilization, and need not detain us long. It was Athens, and a few other City-States which followed her example, which presented the best of Greece and passed on to the modern world what was most valuable for civilization.

1. *Education in Sparta*

The people. The system of training which was maintained in Sparta was in part a reflection of the character of the people, and in part a result of its geographical location. A warlike people by nature, the Spartans were for long regarded as the ablest fighters in Greece. Laconia, their home, was a plain surrounded by mountains. They represented but a small percentage of the total population, which they held in subjection to them by their military power. The slaves (Helots) were often troublesome, and were held in check by many kinds of questionable practices. Education for citizenship with the Spartans meant education for usefulness in an intensely military State, where preparedness was a prerequisite to safety. Strength, courage, endurance, cunning, patriotism, and obedience were the virtues most highly prized, while the humane, literary, and artistic sentiments were neglected *(R. 1)*.

The educational system. At birth the child was examined by a council of elders (R. 1), and if it did not appear to be a promising child it was exposed to die in the mountains. If kept, the mother had charge of the child until seven if a boy, and still longer if a girl. At the beginning of the eighth year, and until the boy reached the age of eighteen, he lived in a public barrack, where he was given little except physical drill and instruction in the Spartan virtues. His food and clothing were scant and his bed hard. Each older man was a teacher. Running, leaping, boxing, wrestling, military music, military drill, ball-playing, the use of the spear, fighting, stealing, and laconic speech and demeanor constituted the course of study. From eighteen to twenty was spent in professional training for war, and frequently the youth was publicly whipped to develop his courage and endurance. For the next ten years — that is, until he was thirty years old — he was in the army at some frontier post. At thirty the young man was admitted to full citizenship and compelled to marry, though continuing to live at the public barrack and spending his energies in training boys (R. 1). Women and girls were given gymnastic training to make them strong and capable of bearing strong children. The family was virtually suppressed in the interests of defense and war. The intellectual training consisted chiefly in committing to memory the Laws of Lycurgus, learning a few selections from Homer, and listening to the conversation of the older men.

As might naturally be supposed, Sparta contributed little of anything to art, literature, science, philosophy, or government. She left to the world some splendid examples of heroism, as for example the sacrifice of Leonidas and his Spartans to hold the pass at Thermopylæ, and a warning example of the brutalizing effect on a people of excessive devotion to military training. It is a pleasure to turn from this dark picture to the wonderful (for the time) educational system that was gradually developed at Athens.

2. *The old Athenian education*

Schools and teachers. Athenian education divides itself naturally into two divisions — the old Athenian training which prevailed up to about the time of the close of the Persian Wars (479 B.C.) and was an outgrowth of earlier tribal observances and practices, and later Athenian education, which characterized the period of maximum greatness of Athens and afterward. We shall describe these briefly, in order.

The state military socialism of Sparta made no headway in more democratic Attica. The citizens were too individualistic, and did their own thinking too well to permit the establishment of any such plan. While education was a necessity for citizenship, and the degree could not be obtained without it, the State nevertheless left every citizen free to make his own arrangements for the education of his sons, or to omit such education if he saw fit. Only instruction in reading, writing, music, and gymnastics were required. If family pride, and the sense of obligation of a parent and a citizen were not sufficient to force the father to educate his son, the son was then by law freed from the necessity of supporting his father in his old age. The State supervised education, but did not establish it.

FIG. 2. A GREEK BOY

The teachers were private teachers, and derived their livelihood from fees. These naturally varied much with the kind of teacher and the wealth of the parent, much as private lessons in music or dancing do to-day. As was common in antiquity, the teachers occupied but a low social position (**R. 5**), and only in the higher schools of Athens was their standing of any importance. Greek literature contains many passages which show the low social status of the schoolmaster. Schools were open from dawn to dark. The school discipline was severe, the rod being freely used both in the school and in the home. There were no Saturday and Sunday holidays or long vacations, such as we know, but about ninety festival and other state holidays served to break the continuity of instruction (**R. 3**). The schoolrooms were provided by the teachers, and were wholly lacking in teaching equipment, in any modern sense of the term. However, but little was needed. The instruction was largely individual instruction, the boy coming, usually in charge of an old slave known as a *pedagogue*, to receive or recite his lessons. The teaching process was essentially a telling and a learning-by-heart procedure.

For the earlier years there were two schools which boys attended — the music and literary school, and a school for physical training. Boys probably spent part of the day at one school and part at the other, though this is not certain. They may have attended the two schools on alternate days. From sixteen to eighteen, if his parents were able, the boy attended a state-supported *gymnasium*, where an advanced type of physical training was given. As this was preparatory for the next two years of army service, the *gymnasia* were supported by the State more as preparedness measures than as educational institutions, though they partook of the nature of both.

Early childhood. As at Sparta the infant was examined at birth, but the father, and not a council of citizens, decided whether or not it was to be "exposed" or preserved. Three ceremonies, of ancient tribal origin, marked the recognition and acceptance of the child. If approved, the child's name was entered on the registry of the clan, and he might then aspire to citizenship and inherit property from his parent (**R.** 4).

Up to the age of seven both boys and girls grew up together in the home, under the care of the nurse and mother, engaging in much the same games and sports as do children anywhere. From the first they were carefully disciplined for good behavior and for the establishment of self-control (**R.** 3). After the age of seven the boy and girl parted company in the matter of their education, the girl remaining closely secluded in the home (women and children were usually confined to the upper floor of the house) and being instructed in the household arts by her mother, while the boy went to different teachers for his education. Probably many girls learned to read and write from their mothers or nurses, and the daughters of well-to-do citizens learned to spin, weave, sew, and embroider. Music was also a common accomplishment of women.

The school of the grammatist. A Greek boy, unlike a modern school child, did not go to one teacher. Instead he had at least two teachers, and sometimes three. To the *gràmmatist*, who was doubtless an evolution from an earlier tribal scribe, he went to learn to read and write and count. The grammatist represented the earliest or primary teacher. To the music teacher, who probably at first taught reading and writing also, he went for his instruction in music and literature. Finally, to the *palæstra* he went for instruction in physical training (**R.** 3).

Reading was taught by first learning the letters, then syllables, and finally words. Plaques of baked earth, on which the alphabet was written, like the more modern hornbook (see Figure 49), were frequently used. The ease with which modern children learn to read was unknown in Greece. Reading was very difficult to learn, as accentuation, punctuation, spacing between words, and small letters had not as yet been introduced. As a result the study required much time, and much personal ingenuity had to be exercised in determining the meaning of a sentence. The inscription shown in Figure 3 will illustrate the difficulties quite well. The Athenian accent, too, was hard to acquire.

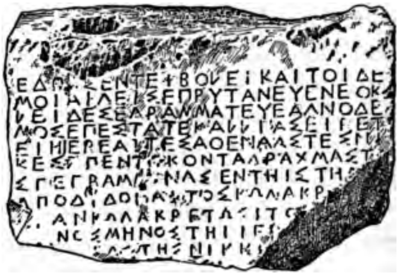

FIG. 3. AN ATHENIAN INSCRIPTION

A decree of the Council and Assembly, dating from about 450 B.C. Note the difficulty of trying to read, without any punctuation, and with only capital letters.

The pupil learned to write by first tracing, with the stylus, letters cut in wax tablets, and later by copying exercises set for him by his teacher, using the wax tablet and writing on his knee. Still later the pupil learned to write with ink on papyrus or parchment, though, due to the cost of parchment in ancient times, this was not greatly used. Slates and paper were of course unknown in Greece.

There was little need for arithmetic, and but little was taught. Arithmetic such as we teach would have been impossible with their cumbrous system of notation. Only the elements of counting were taught, the Greek using his fingers or a counting-board, such as is shown in Figure 5, to do his simple reckoning.

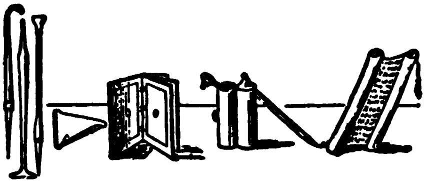

FIG. 4. GREEK WRITING-MATERIALS

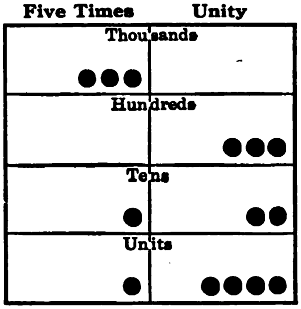

FIG. 5
A GREEK COUNTING-BOARD

Pebbles of different size or color were used for thousands, hundreds, tens, and units. Their position on the board gave them their values. The board now shows the total 15,379.

Great importance of reading and literature. After the pupil had learned to read, much attention was given to accentuation and articulation, in order to secure beautiful reading. Still more, in reading or reciting, the parts were acted out. The Greeks were a nation of actors, and the recitations in the schools and the acting in the theaters gave plenty of opportunity for expression. There were no schoolbooks, as we know them. The master dictated and the pupils wrote down, or, not uncommonly, learned by heart what the master dictated. Ink and parchment were now used, the boy making his own schoolbooks. Homer was the first and the great reading book of the Greeks, the *Iliad* and the *Odyssey* being the Bible of the Greek people.

The music school. The teacher in this school gradually separated himself from the grammatist, and often the two were found in adjoining rooms in the same school. In his functions he succeeded the wandering poet or minstrel of earlier times. Music teachers were common in all the City-States of Greece. To this teacher the boy went at first to recite his poetry, and after the thirteenth year for a special music course. The teacher was known as a *citharist*, and the instrument used was the seven-stringed lyre. Rhythm, melody, and the feeling for measure and time were important in instruction, whose office was to soothe, purge, and harmonize man within and make him fit for moral instruction through the poetry with which their music was ever associated. Instead of being a distinct art, as with us, and taught by itself, music with the Greeks was always subsidiary to the expression of the spirit of their literature, and in aim it was for moral-training ends.

The first lessons taught the use of the instrument, and the simple chants of the religious services were learned. As soon as the pupil knew how to play, the master taught him to render the works of the great lyric poets of Greece. Poetry and music together thus formed a single art. At thirteen a special music course began which lasted until sixteen, but which only the sons of the more well-to-do citizens attended. Every boy, though, learned some music, not that he might be a musician, but that he might be musical and able to perform his part at social gatherings and participate in the religious services of the State. Professional playing was left to slaves and foreigners, and was deemed unworthy a free man and a citizen. Professionalism in either music or athletics was regarded as disgraceful. The purpose of both activities was harmonious personal development, which the Greeks believed contributed to moral worth.

The palæstra; gymnastics. Very unlike our modern education, fully one half of a boy's school life, from eight to sixteen, was given to sports and games in another school under different teachers, known as the *palæstra*. The work began gradually, but by fifteen had taken precedence over other studies. As in music, harmonious physical development and moral ends were held to be of fundamental importance. The standards of success were far from our modern standards. To win the game was of little significance; the important thing was to do the part gracefully and, for the person concerned, well. To attain to a graceful and dignified carriage of the body, good physical health, perfect control of the temper, and to develop quickness of perception, self-possession, ease, and skill in the games were the aims — not mere strength or athletic prowess (**R. 2**). Only a few were allowed to train for participation in the Olympian games.

The work began with children's games, contests in running, and ball games of various kinds. Deportment — how to get up, walk, sit, and how to achieve easy manners — was taught by the masters. After the pupils came to be a little older there was a definite course of study, which included, in succession: (1) leaping and jumping, for general bodily and lung development; (2) running contests, for agility and endurance; (3) throwing the discus, for arm exercise; (4) casting the javelin, for bodily poise and coördination of movement, as well as for future use in hunting; (5) boxing and wrestling, for quickness, agility, endurance, and the control of the temper and passions. Swimming and dancing were also included for all, dancing being a slow and graceful movement of the body to music, to develop grace of motion and beauty of form, and to exercise the whole human being, body and soul. The minuet and some of our folk-dancing are our nearest approach to the Greek type of dancing, though still not like it. The modern partner dance was unknown in ancient Greece.

The exercises were performed in classes, or in small groups. They took place in the open air, and on a dirt or sandy floor. They were accompanied by music — usually the flute, played by a paid performer. A number of teachers looked after the boys, examining them physically, supervising the exercises, directing the work, and giving various forms of instruction.

The gymnasial training, sixteen to eighteen. Up to this point the education provided was a private and a family affair. In the home and in the school the boy had now been trained to be a gentleman, to revere the gods, to be moral and upright according to

Greek standards, and in addition he had been given that training in reading, writing, music, and athletic exercises that the State required parents to furnish. It is certain that many boys, whose parents could ill afford further expense for schooling, were allowed to quit the schools at from thirteen to fifteen. Those who expected to become full citizens, however, and to be a part of the government and hold office, were required to continue until twenty years of age. Two years more were spent in schooling, largely athletic, and two years additional in military service. Of this additional training, if his parents chose and could afford it, the State now took control.

For the years from sixteen to eighteen the boy attended a state *gymnasium*, of which two were erected outside of Athens by the State, in groves of trees, in 590 B.C. The boy now had for teachers a number of gymnasts of ability. The old exercises of the *palæstra* were continued, but running, wrestling, and boxing were much emphasized. The youth learned to run in armor, while wrestling and boxing became more severe. He also learned to ride a horse, to drive a chariot, to sing and dance in the public choruses, and to participate in the public state and religious processions.

Still more, the youth now passed from the supervision of a family pedagogue to the supervision of the State. For the first time in his life he was now free to go where he desired about the city; to frequent the streets, market-place, and theater; to listen to debates and jury trials, and to witness the great games; and to mix with men in the streets and to mingle somewhat in public affairs. He saw little of girls, except his sisters, but formed deep friendships with other young men of his age. Aside from a requirement that he learn the laws of the State, his education during this period was entirely physical and civic. If he abused his liberty he was taken in hand by public officials charged with the supervision of public morals. He was, however, still regarded as a minor, and his father (or guardian) was held responsible for his public behavior.

The citizen-cadet years, eighteen to twenty. The supervision of the State during the preceding two years had in a way been joint with that of his father; now the State took complete control. At the age of eighteen his father took him before the proper authorities of his district or ward in the city, and presented him as a *candidate for citizenship*. He was examined morally and physically, and if sound, and if the records showed that he was the legitimate son of a citizen, his name was entered on the register of his ward as a prospective member of it (R. 4). His long hair was now cut, he donned the black garb of the citizen, was presented to the people along with others at a public ceremony, was publicly armed with a spear and a shield, and then, proceeding to one of the shrines of the city, on a height overlooking it, he solemnly took the Ephebic oath:

> I will never disgrace these sacred arms, nor desert my companion in the ranks. I will fight for temples and public property, both alone and with many. I will transmit my fatherland, not only not less, but greater and better, than it was transmitted to me. I will obey the magistrates who may at any time be in power. I will observe both the existing laws and those which the people may unanimously hereafter make, and, if any person seek to annul the laws or to set them at naught, I will do my best to prevent him, and will defend them both alone and with many. I will honor the religion of my fathers. And I call to witness Aglauros, Enyalios, Ares, Zeus, Thallo, Auxo, and Hegemone.

He was now an *Ephebos*, or citizen-cadet, with still two years of severe training ahead of him before he could take up the full duties of citizenship. The first year he spent in and near Athens, learning to be a soldier. He did what recruits do almost everywhere — drill, camp in the open, learn the army methods and discipline, and march in public processions and take part in religious festivals. This first year was much like that of new troops in camp being worked into real soldiers. At the end of the year there was a public drill and inspection of the cadets, after which they were sent to the frontier. It was now his business to come to know his country thoroughly — its topography, roads, springs, seashores, and mountain passes. He also assisted in enforcing law and order throughout the country districts, as a sort of a state constabulary or rural police. At the end of this second year of practical training the second examination was held, the cadet was now admitted to full citizenship, and passed to the ranks of a trained citizen in the reserve army of defense, as does a boy in Switzerland to-day (R. 4).

Results under the old Greek system. Such was the educational system which was in time evolved from the earlier tribal practices of the citizens of old Athens. If we consider Sparta as representing the earlier tribal education of the Greek peoples, we see *how far the Athenians,* due to their wonderful ability to make progress, were able to advance beyond this earlier type of preparation for citizenship (**R. 5**). Not only did Athens surpass all Greece, but, for the first time in the history of the world, we find here, expressing itself in the education of the young, the modern, western, individualistic and democratic spirit, as opposed to the deadening caste and governmental systems of the East. Here first we find a free people living under political conditions which favored liberty, culture, and intellectual growth, and using their liberty to advance the culture and the knowledge of the people (**R. 6**).

Here also we find, for the first time, the thinkers of the State deeply concerned with the education of the youth of the State, and viewing education as a necessity to make life worth living and secure the State from dangers, both within and without. To prepare men by a severe but simple and honest training to fear the gods, to do honest work, to despise comfort and vice, to obey the laws, to respect their neighbors and themselves, and to reverence the wisdom of their race, was the aim of this old education. The schooling for citizenship was rigid, almost puritanical, but it produced wonderful results, both in peace and in war. Men thus trained guided the destinies of Athens during some two centuries, and the despotism of the East as represented by Persia could not defeat them at Marathon, Salamis, and Platæa.

The simple and effective curriculum. The simplicity of the curriculum was one of its marked features. In a manner seldom witnessed in the world's educational history, the Greeks used their religion, literature, government, and the natural activities of young men to impart an education of wonderful effectiveness. The subjects we have valued so highly for training were to them unknown. They taught no arithmetic or grammar, no science, no drawing, no higher mathematics, and no foreign tongue. Music, the literature and religion of their own people, careful physical training, and instruction in the duties and practices of citizenship constituted the entire curriculum.

It was an education by doing; not one of learning from books. That it was an attractive type of education there is abundant testimony by the Greeks themselves. We have not as yet come to value physical education as did the Greeks, nor are we nearly so successful in our moral education, despite the aid of the Christian religion which they did not know. It was, to be sure, class education, and limited to but a small fraction of the total population. In it girls had no share. There were many features of

Greek life, too, that are repugnant to modern conceptions. Yet, despite these limitations, the old education of Athens still stands as one of the most successful in its results of any system of education which has been evolved in the history of the world. Considering its time and place in the history of the world and that it was a development for which there were nowhere any precedents, it represented a very wonderful evolution.

QUESTIONS FOR DISCUSSION

1. Why are imaginative ability and many-sided natures such valuable characteristics for any people?
2. Is the ability to make progressive changes, possessed so markedly by the Athenian Greeks, an important personal or racial characteristic? Why?
3. Are the Athenian characteristics, stated in the text of page 6, characteristics capable of development by training, or are they native, or both?
4. How do you explain the Greek failure to achieve political unity?
5. Would education for citizenship with us to-day possess the same defects as in ancient Greece? Why? Do we give an equivalent training?
6. Which is the better attitude for a nation to assume toward the foreigner — the Greek, or the American? Why?
7. Why does a state military socialism, such as prevailed at Sparta, tend to produce a people of mediocre intellectual capacity?
8. How do you account for the Athenian State leaving literary and musical education to private initiative, but supporting state *gymnasia?*
9. Would the Athenian method of instruction have been possible had all children in the State been given an education? Why?
10. How did the education of an Athenian girl differ from that of a girl in the early American colonies?
11. Why did the Greek boy need three teachers, whereas the American boy is taught all and more by one primary teacher?
12. Contrast the Greek method of instruction in music, and the purposes of the instruction, with our own.
13. How could we incorporate into our school instruction some of the important aspects of Greek instruction in music?
14. What do you think of the contentions of Aristotle and Plato that the State should control school music as a means of securing sound moral instruction?
15. Does the Greek idea that a harmonious personal development contributes to moral worth appeal to you? Why?
16. Contrast the Greek ideal as to athletic training with the conception of athletics held by an average American schoolboy.
17. Contrast the education of a Greek boy at sixteen with that of an American boy at the same age.
18. Contrast the emphasis placed on expression as a method in teaching in the schools of Athens and of the United States.
19. Do the needs of modern society and industrial life warrant the greater emphasis we place on learning from books, as opposed to the learning by doing of the Greeks?
20. Compare the compulsory-school period of the Greeks with our own.

If we were to add some form of compulsory military training, for all youths between eighteen and twenty, and as a preparedness measure, would we approach still more nearly the Greek requirements?

21. Explain how the Athenian Greeks reconciled the idea of social service to the State with the idea of individual liberty, through a form of education which developed personality. Compare this with our American ideal.
22. The Greek schoolboy had no long summer vacation, as do American children. Is there any special reason why we need it more than did they?
23. Do we believe that virtue can be taught in the way the Hellenic peoples did? Do we carry such a belief into practice?

SELECTED READINGS

In the accompanying *Book of Readings* the following selections are reproduced:

1. Plutarch: Ancient Education in Sparta.
2. Plato: An Athenian Schoolboy's Life.
3. Lucian: An Athenian Schoolboy's Day.
4. Aristotle: Athenian Citizenship and the Ephebic Years.
5. Freeman: Sparta and Athens compared.
6. Thucydides: Athenian Education summarized.

(For SUPPLEMENTAL REFERENCES, see following chapter.)

CHAPTER II

LATER GREEK EDUCATION

III. THE NEW GREEK EDUCATION

Political events: The Golden Age of Greece. The Battle of Marathon (490 B.C.) has long been considered one of the "decisive battles of the world." Had the despotism of the East triumphed here, and in the subsequent campaign that ended in the defeat of the Persian fleet at Salamis (480 B.C.) and of the Persian army at Platæa (479 B.C.), the whole history of our western world would have been different. The result of the war with Persia was the triumph of this new western democratic civilization, prepared and schooled for great national emergencies by a severe but effective training, over the uneducated hordes led to battle by the autocracy of the East.

Marathon broke the spell of the Persian name and freed the more progressive Greeks to pursue their intellectual and political development. Above all it revealed the strength and power of the Athenians to themselves, and in the half-century following the most wonderful political, literary, and artistic development the world had ever known ensued, and the highest products of Greek civilization were attained. Attica had braved everything for the common cause of Greece, even to leaving Athens to be burned by the invader, and for the next fifty years she held the position of political as well as cultural preëminence among the Greek City-States. Athens now became the world center of wealth and refinement and the home of art and literature (**R. 7**), and her influence along cultural lines, due in part to her mastery of the sea and her growing commerce, was now extended throughout the Mediterranean world.

From 479 to 431 B.C. was the Golden Age of Greece, and "during this short period Athens gave birth to more great men — poets, artists, statesmen, and philosophers — than all the world beside had produced in any period of equal length."

Transition from the old to the new. As early as 509 B.C. a new constitution had admitted all the free inhabitants of Attica to citizenship, and the result was a rapid increase in the prestige, property, and culture of Athens. Citizenship was now open to the commercial classes, and no longer restricted to a small, properly born, and properly educated class. Wealth now became important in giving leisure to the citizen, and was no longer looked down upon as it had been in the earlier period. After the Peloponnesian War the predominance of Attica among the Greek States, the growth of commerce, the constant interchange of embassies, the travel overseas of Athenian citizens, and the presence of many foreigners in the State all alike led to a tolerance of new ideas and a criticism of old ones which before had been unknown.

Changes in the old education. A number of changes in the character of the old education were now gradually introduced. The rigid drill of the earlier period began to be replaced by an easier and a more pleasurable type of training. Gymnastics for personal enjoyment began to replace drill for the service of the State, and was much less rigid in type. The old authors, who had rendered important service in the education of youth, began to be replaced by more modern writers, with a distinct loss of the earlier religious and moral force. New musical instruments, giving a softer and more pleasurable effect, took the place of the seven-stringed lyre, and complicated music replaced the simple Doric airs of the earlier period. Education became much more individual, literary, and theoretical. Geometry and drawing were introduced as new studies. Grammar and rhetoric began to be studied, discussion was introduced, and a certain glibness of speech began to be prized. The citizen-cadet years, from sixteen to twenty, formerly devoted to rather rigorous physical training, were now changed to school work of an intellectual type.

New teachers; the Sophists. New teachers, known as Sophists, who professed to be able to train men for a political career, began to offer a more practical course designed to prepare boys for the newer type of state service. These in time drew many Ephebes into their private schools, where the chief studies were on the content, form, and practical use of the Greek language. Rhetoric and grammar before long became the master studies of this new period, as they were felt to prepare boys better for the new political and intellectual life of Hellas than did the older type of training. In the schools of the Sophists boys now spent their time in forming phrases, choosing words, examining grammatical structure, and learning how to secure rhetorical effect. Many of these new teachers made most extravagant claims for their instruction (R. 8) and drew much ridicule from the champions of the older type of education, but within a century they had thoroughly established themselves, and had permanently changed the character of the earlier Greek education.

By 350 B.C. we find that Greek school education had been differentiated into three divisions, as follows:

1. *Primary education*, covering the years from seven or eight to thirteen, and embracing reading, writing, arithmetic, and chanting. The teacher of this school came to be known as a *grammatist.*
2. *Secondary education*, covering the years from thirteen to sixteen, and embracing geometry, drawing, and a special music course. Later on some grammar and rhetoric were introduced into this school. The teacher of this school came to be known as a *grammaticus.*
3. *Higher or university education*, covering the years after sixteen.

The flood of individualism. This period of artistic and intellectual brilliancy of Greece following the Peloponnesian War marked the beginning of the end of Greece politically. The war was a blow to the strength of Greece from which the different States never recovered. Greece was bled white by this needless civil strife. The tendencies toward individualism in education were symptomatic of tendencies in all forms of social and political life. The philosophers — Xenophon, Plato, and Aristotle — proposed ideal remedies for the evils of the State, but in vain. The old ideal of citizenship died out. Service to the State became purely subordinate to personal pleasure and advancement. Irreverence and a scoffing attitude became ruling tendencies. Family morality decayed. The State in time became corrupt and nerveless. Finally, in 338 B.C., Philip of Macedon became master of Greece, and annexed it to the world empire which he and his son Alexander created. Still later, in 146 B.C., the new world power to the west, Rome, conquered Greece and made of it a Roman province.

Though dead politically, there now occurred the unusual spectacle of "captive Greece taking captive her rude conqueror," and spreading Greek art, literature, philosophy, science, and Greek ideas throughout the Mediterranean world. It was the Greek higher learning that now became predominant and exerted such great influence on the future of our world civilization. It remains now to trace briefly the development and spread of this higher learning, and to point out how thoroughly it modified the thinking of the future.

FIG. 6
SOCRATES (469–399 B.C.)
(After a marble bust in the Vatican Gallery, at Rome)

New schools; Socrates. In the beginning each Sophist teacher was a free lance, and taught what he would and in the manner he thought best. Many of them made extraordinary efforts to attract students and win popular approval and fees. Plato represents the Sophist Protagoras as saying, with reference to a youth ambitious for success in political life, "If he comes to me he will learn that which he comes to learn." At first the instruction was largely individual, but later classes were organized. Isocrates, who lived from 436 to 338 B.C., organized the instruction for the first time into a well-graded sequence of studies, with definite aims and work (**R. 8**). He shifted the emphasis in instruction from training for success in argumentation, to training to think clearly and to express ideas properly. His pupils were unusually successful, and his school did much to add to the fame of Athens as an intellectual center. From his work sprang a large number of so-called Rhetorical Schools, much like our better private schools and academies, offering to those Ephebes who could afford to attend a very good preparation for participation in the public life of the period.

In contrast with the Sophists, a series of schools of philosophy also arose in Athens. These in a way were the outgrowth of the work of Socrates. Accepting the Sophists' dictum that "man is the measure of all things," he tried to turn youths from the baser individualism of the Sophists of his day to the larger general truths which measure the life of a true man. In particular he tried to show that the greatest of all arts — the art of living a good life — called for correct individual thinking and a knowledge of the right. "Know thyself" was his great guiding principle. His emphasis was on the problems of everyday morality. Frankly accepting the change from the old education as a change that could not be avoided, he sought to formulate a new basis for education in personal morality and virtue, and as a substitute for the old training for service to the State. He taught by conversation, engaging men in argument as he met them in the street, and showing to them their ignorance (**R. 9**). Even in Athens, where free speech was enjoyed more than anywhere else in the world at that time, such a shrewd questioner would naturally make enemies, and in 399 B.C. at the age of seventy-one, he was condemned to death by the Athenian populace on the charge of impiety and corrupting the youth of Athens.

Socrates' greatest disciple was a citizen of wealth by the name of Plato, who had abandoned a political career for the charms of philosophy, and to him we owe our chief information as to the work and aims of Socrates. In 386 B.C. he founded the Academy, where he passed almost forty years in lecturing and writing. His school, which formed a model for others, consisted of a union of teachers and students who possessed in common a chapel, library, lecture-rooms, and living-rooms. Philosophy, mathematics, and science were taught, and women as well as men were admitted.

Other schools of importance in Athens were the Lyceum, founded in 335 B.C. by a foreign-born pupil of Plato's by the name of Aristotle, who did a remarkable work in organizing the known knowledge of his time; the school of the Stoics, founded by Zeno in 308 B.C.; and the school of the Epicureans, founded by Epicurus in 306 B.C. Each of these schools offered a philosophical solution of the problem of life, and Plato and Aristotle wrote treatises on education as well. Each school evolved into a form of religious brotherhood which perpetuated the organization after the death of the master. In time these became largely schools for expounding the philosophy of the founder.

The University of Athens. Coincident with the founding of these schools and the political events we have previously recorded, certain further changes in Athenian education were taking place. The character of the changes in the education before the age of sixteen we have described. As a result in part of the development of the schools of the Sophists, which were in themselves only attempts to meet fundamental changes in Athenian life, the education of youths after sixteen tended to become literary, rather than physical and military. The Ephebic period of service (from eighteen to twenty) was at first reduced from two years to one, and after the Macedonian conquest, in 338 B.C., when there was no longer an Athenian State to serve or protect, the entire period of training was made optional. The Ephebic corps was now opened to foreigners, and in time became merely a fashionable semi-military group. Instead of the military training, attendance at the lectures of the philosophical schools was now required, and attendance at the rhetorical schools was optional. Later the philosophical schools were granted public support by the Athenian Assembly, professorships were created over which the Assembly exercised supervision, the rhetorical and philosophical schools were gradually merged, the study years were extended from two to six, or seven, a form of university life as regards both students and professors was developed, and what has since been termed "The University of Athens" was evolved.

As Athens lost in political power her citizens turned their attention to making their city a center of world learning. This may be said to have been accomplished by 200 B.C. Though Greece had long since become a Macedonian province, and was soon to pass under the control of Rome, the so-called University of Athens was widely known and much frequented for the next three hundred years, and continued in existence until finally closed, as a center of pagan thought, by the edict of the Roman-Christian Emperor, Justinian, in 529 A.D. Though reduced to the rank of a Roman provincial town, Athens long continued to be a city of letters and a center of philosophic and scientific instruction.

Spread and influence of Greek higher education. Alexander the Great rendered a very important service in uniting the western Orient and the eastern Mediterranean into a common world empire, and in establishing therein a common language, literature, philosophy, a common interest, and a common body of scientific knowledge and law. It was his hope to create a new empire, in which the distinction between European and Asiatic should pass away. No less than seventy cities were established with a view to holding his empire together. These served to spread Hellenic culture. Greek schools, Greek theaters, Greek baths, and Greek institutions of every type were to be found in practically all of them, and the Greek tongue was heard in them all. With Alexander the Great the history of Greek life, culture, and learning merges into that of the history of the ancient world. Everywhere throughout the new empire Greek philosophers and scientists, architects and artists, merchants and colonists, followed behind the Macedonian armies, spreading Greek civilization and becoming the teachers of an enlarged world. "Greek cities stretched from the Nile to the Indus, and dotted the shores of the Black and the Caspian seas. The Greek language, once the tongue of a petty people, grew to be a universal language of culture, spoken even by barbarian lips, and the art, the science, the literature, the principles of politics and philosophy, developed in isolation by the Greek mind, henceforth became the heritage of many nations." Greek universities were established at Pergamum and Tarsus in Asia Minor; at Rhodes on the island of that name in the Ægean; and at the newly founded city of Alexandria in Egypt.

Mingling of Orient and Occident at Alexandria. The most famous of all these Greek institutions, however, was the University of Alexandria, which gradually sapped Athens as a center of learning and became the intellectual capital of the world. The greatest library of manuscripts the world had ever known was collected together here. It is said to have numbered over 700,000 volumes. These included Greek, Jewish, Egyptian, and Oriental works. In connection with the library was the museum, where men of letters and investigators were supported at royal expense. These two constituted an institution so like a university that it has been given that name. Alexandria became not only a great center of learning, but, still more important, the chief mingling place for Greek, Jew, Egyptian, Roman, and Oriental, and here Greek philosophy, Hebrew and Christian religion, and Oriental faith and philosophy met and mixed. It was this mingled civilization and culture, all tinged through and through with the Greek, with which the Romans came in contact as they pushed their conquering armies into the eastern Mediterranean.

Alexandria sapped in turn. In 30 B.C. Alexandria, too, came under Roman rule and was, in turn, gradually sapped by Rome. Greek influence continued, but the interest became largely philosophical. Ultimately Alexandria became the seat of a metaphysical school of Christian theology, and the scene of bitter religious controversies. In 330 A.D., Constantinople was founded on the site of the earlier Byzantium, and soon thereafter Greek scholars transferred their interest to it and made it a new center of Greek learning. There Greek science, literature, and philosophy were preserved for ten centuries, and later handed back to a Europe just awakening from the long intellectual night of the Middle Ages. In 640 A.D. Alexandria was taken by the Mohammedans, and the university ceased to exist. The great library was destroyed, furnishing, it is said, "fuel sufficient for four thousand public baths for a period of six months," and Greek learning was extinguished in the western world.

Our debt to Hellas. As a political power the Greek States left the world nothing of importance. As a people they were too individualistic, and seemed to have a strange inability to unite for political purposes. To the new power slowly forming to the westward — Rome — was left the important task, which the Greek people were never able to accomplish, of uniting civilization into one political whole. The world conquest that Greece made was intellectual. As a result, her contribution to civilization was artistic, literary, philosophical, and scientific, but not political. The Athenian Greeks were a highly artistic and imaginative rather than a practical people. They spent their energy on other matters than government and conquest. As a result the world will be forever indebted to them for an art and a literature of incomparable beauty and richness which still charms mankind; a philosophy which deeply influenced the early Christian religion, and has ever since tinged the thinking of the western world; and for many important beginnings in scientific knowledge which were lost for ages to a world that had no interest in or use for science. So deeply has our whole western civilization been tinctured by Greek thought that one enthusiastic writer has exclaimed, — "Except the blind forces of Nature, nothing moves in this world which is not Greek in its origin." (R. 11.)

In education proper the old Athenian education offers us many lessons of importance that we of to-day may well heed. In the emphasis they placed on moral worth, education of the body as well as the mind, and moderation in all things, they were much ahead of us. Their schools became a type for the cities of the entire Mediterranean world, being found from the Black Sea south to the Persian Gulf and westward to Spain. When Rome became a world empire the Greek school system was adopted, and in modified form became dominant in Rome and throughout the provinces, while the universities of the Greek cities for long furnished the highest form of education for ambitious Roman youths. In this way Greek influence was spread throughout the Mediterranean world. The higher learning of the Greeks, preserved first at Athens and Alexandria, and later at Constantinople, was finally handed back to the western world at the time of the Italian Revival of Learning, after Europe had in part recovered from the effects of the barbarian deluge which followed the downfall of Rome.

QUESTIONS FOR DISCUSSION

1. Try to picture what might have been the result for western civilization had the small and newly-developed democratic civilization of Greece

been crushed by the Persians at the time they overran the Greek peninsula.

2. Do periods of great political, commercial, and intellectual expansion usually subject old systems of morality and education to severe strain?
3. Why was the change in the type of Athenian education during the Ephebic years a natural and even a necessary one for the new Athens?
4. Do you understand that the system of training before the Ephebic years was also seriously changed, or was the change largely a re-shaping and extension of the education of youths after sixteen?
5. Were the Sophists a good addition to the Athenian instructing force, or not? Why?
6. How may a State establish a corrective for such a flood of individualism as overwhelmed Greece, and still allow individual educational initiative and progress?
7. Do we as a nation face danger from the flood of individualism we have encouraged in the past? How is our problem like and unlike that of Athens after the Peloponnesian War?
8. In what ways was the conquest of Alexander good for world civilization?
9. Of what importance is it, in the history of our western civilization, that Greek thought had so thoroughly permeated the eastern Mediterranean world before Roman armies conquered the region?
10. Picture for yourself the great intellectual advances of the Greeks by contrasting the tribal preparedness-type of education of the early Greek States and the learning possessed by the scholars of Alexandria.
11. Compare the spread of Greek language and knowledge throughout the eastern Mediterranean world, following the conquests of Alexander, with the spread of the English language and ideas as to government throughout the modern world.

SELECTED READINGS

In the accompanying *Book of Readings* the following selections are reproduced:

7. Wilkins: Athens in the Time of Pericles.
8. Isocrates: The Instruction of the Sophists.
9. Xenophon: An Example of Socratic Teaching.
10. Draper: The Schools of Alexandria.
11. Butcher: What we Owe to Greece.

SUPPLEMENTAL REFERENCES

*The most important references are indicated by an **

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* Butcher, S. H. *Some Aspects of the Greek Genius.*
* Davidson, Thos. *Aristotle, and Ancient Educational Ideals.*
* Freeman, K. J. *Schools of Hellas.*
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Laurie, S. S. *Historical Survey of Pre-Christian Education.*
* Mahaffy, J. P. *Old Greek Education.*
Sandys, J. E. *History of Classical Scholarship*, vol. I.
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Wilkins, A. S. *National Education in Greece in the Fourth Century*, B.C.

CHAPTER III

THE EDUCATION AND WORK OF ROME

I. THE ROMANS AND THEIR MISSION

Development of the Roman State. About the time that the Hellenes, in the City-States of the Greek peninsula, had brought their civilization to its Golden Age, another branch of the great Aryan race, which had previously settled in the Italian peninsula, had begun the creation of a new civilization there which was destined to become extended and powerful. At the beginning of

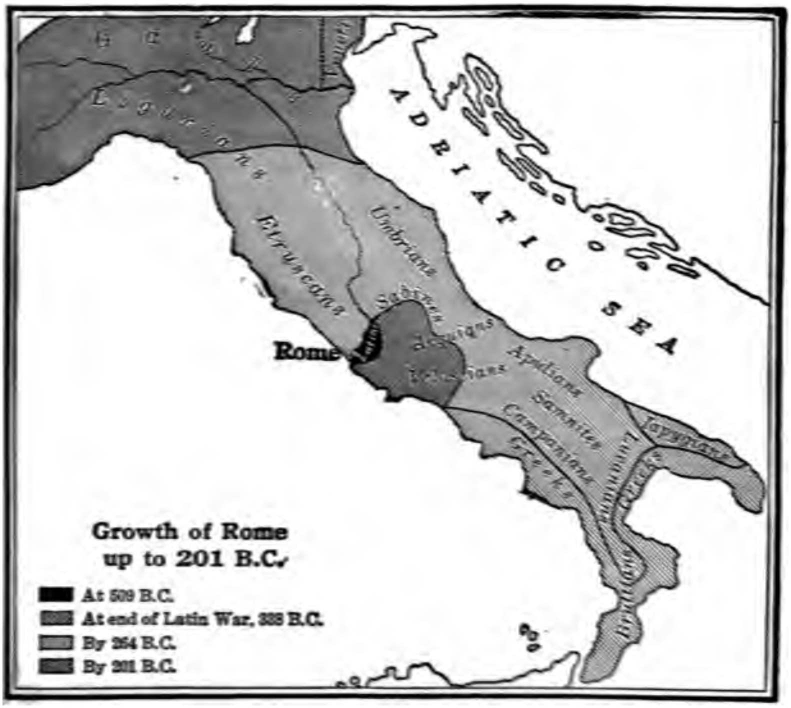

FIG. 7. THE EARLY PEOPLES OF ITALY, AND THE EXTENSION OF THE ROMAN POWER

In 509 B.C. Attica opened her citizenship to all free inhabitants, and half a century later the Golden Age of Greece was in full swing. By 338 B.C. Greece's glory had departed. Philip of Macedon had become master, and its political freedom was over. By 264 B.C. the center of Greek life and thought had been transferred to Alexandria, and Rome's great expansion had begun.

recorded history we find a number of tribes of this branch of the Aryan race settled in different parts of Italy, as is shown in Figure 7. Slowly, but gradually, the smallest of these divisions, the Latins, extended its rule over the other tribes, and finally over the Greek settlements to the south and the Gauls to the north, so that by 201 B.C. the entire Italian peninsula had become subject to the City-State government at Rome.

By a wise policy of tolerance, patience, conciliation, and assimilation the Latins gradually became the masters of all Italy. Unlike the Greek City-States, Rome seemed to possess a natural genius for the art of government. Upon the people she conquered she bestowed the great gift of Roman citizenship, and she attached them to her by granting local government to their towns and by interfering as little as possible with their local manners, speech, habits, and institutions. By founding colonies among them and by building excellent military roads to them, she insured her rule, and by kindly and generous treatment she bound the different Italian peoples ever closer and closer to the central government at Rome. By a most wonderful understanding of the psychology of other peoples, new in the world before the work of Rome, and not seen again until the work of the English in the nineteenth century, Rome gradually assimilated the peoples of the Italian peninsula and in time amalgamated them into a single Roman race. In speech, customs, manners, and finally in blood she Romanized the different tribes and brought them under her leadership. Later this same process was extended to Spain, Gaul, and even to far-off Britain.

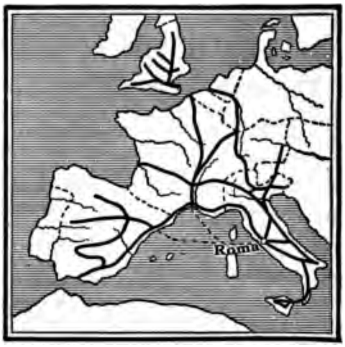

FIG. 8
THE PRINCIPAL ROMAN ROADS

The great mission of Rome. Had Rome tried to impose her rule and her ways and her mode of thought on her subject people, and to reduce them to complete subjection to her, as the modern German and Austrian Empires, for example, tried to do with the peoples who came under their control, the Roman Empire could never have been created, and what would have saved civilization from complete destruction during the period of the barbarian invasions is hard to see. Instead, Rome treated her subjects as her friends, and not as conquered peoples; led them to see that their interests were identical with hers; gave them large local independence and freedom in government, under her strong control of general affairs; opened up her citizenship and the line of promotion in the State to her provincials; and won them to the peace and good order which she everywhere imposed by the advantages she offered through a common language, common law, common coinage, common commercial arrangements, common state service, and the common treatment of all citizens of every race. In consequence, the provincial was willingly absorbed into the common Roman race — absorbed in dress, manners, religion, political and legal institutions, family names, and, most important of all, in language.

II. THE PERIOD OF HOME EDUCATION

The early Romans and their training. In the early history of the Romans there were no schools, and it was not until about 300 B.C. that even primary schools began to develop. What education was needed was imparted in the home or in the field and in the camp, and was of a very simple type. Certain virtues were demanded — modesty, firmness, prudence, piety, courage, seriousness, and regard for duty — and these were instilled both by precept and example. Each home was a center of the religious life, and of civic virtue and authority. In it the father was a high priest, with power of life and death over wife and children. He alone conversed with the gods and prepared the sacrifices. The wife and mother, however, held a high place in the home and in the training of the children, the marriage tie being regarded as very sacred. She also occupied a respected position in society, and was complete mistress of the house (R. 17).

The father trained the son for the practical duties of a man and a citizen; the mother trained the daughter to become a good housekeeper, wife, and mother. Morality, character, obedience to parents and to the State, and whole-hearted service were emphasized. The boy's father taught him to read, write, and count. Stories of those who had done great deeds for the State were told, and martial songs were learned and sung. After 450 B.C. every boy had to learn the Laws of the Twelve Tables (R. 12), and be able to explain their meaning (R. 13). As the boy grew older [illegible]llowed his father in the fields and in the public place and lis[illegible] to the conversation of men.

Education by doing. It was largely an education by doing, as was that of the old Greek period, though entirely different in character. Either by apprenticeship to the soldier, farmer, or statesman, or by participation in the activities of a citizen, was the training needed imparted. Its purpose was to produce good fathers, citizens, and soldiers. Its ideals were found in the real and practical needs of a small State, where the ability to care for one's self was a necessary virtue. To be healthy and strong, to reverence the gods and the institutions of the State, to obey his parents and the laws, to be proud of his family connections and his ancestors, to be brave and efficient in war, to know how to farm or to manage a business, were the aims and ends of this early training. It produced a nation of citizens who willingly subordinated themselves to the interests of the State, a nation of warriors who brought all Italy under their rule, a calculating, practical people who believed themselves destined to become the conquerors and rulers of the world, and a reserved and proud race, trained to govern and to do business, but not possessed of lofty ideals or large enthusiasms in life (**Rs. 15, 16**).

III. THE TRANSITION TO SCHOOL EDUCATION

Beginnings of school education. Up to about 300 B.C. education had been entirely in the home, and in the activities of the fields and the State. It was a period of personal valor and stern civic virtue, in a rather primitive type of society, as yet but little in contact with the outside world, and little need of any other type of training had been felt. Up to about 250 B.C., at least, Roman education remained substantially as it had been in the preceding centuries. Reading, writing, declamation, chanting, and the Laws of the Twelve Tables still constituted the subject-matter of instruction, and the old virtues continued to be emphasized.

By the middle of the third century B.C. Rome had expanded its rule to include nearly all the Italian peninsula (see Figure 7), and was transforming itself politically from a little rural City-State into an Empire, with large world relationships. A knowledge of Greek now came to be demanded both for diplomatic and for business reasons, and the need of a larger culture, to correspond with the increased importance of the State, began to be felt by the wealthier and better-educated classes. Greek scholars, brought in as captured slaves from the Greek colonies of southern Italy, soon began to be extensively employed as teachers and as secretaries.

About 233 B.C., Livius Andronicus, who had been brought to Rome as a slave when Tarentum, one of the Greek cities of southern Italy, was captured, and who later had obtained his freedom, made a translation of the *Odyssey* into Latin, and became a teacher of Latin and Greek at Rome. This had a wonderful effect in developing schools and a literary atmosphere at Rome. The *Odyssey* at once became the great school textbook, in time supplanting the Twelve Tables, and literary and school education now rapidly developed. The Latin language became crystallized in form, and other Greek works were soon translated. The beginnings of a native Latin literature were now made. Greek higher schools were opened, many Greek teachers and slaves offered instruction, and the Hellenic scheme of culture, as it had previously developed in Attica, soon became the fashion at Rome.

Changes in national ideals. The second century B.C. was even more a period of rapid change in all phases and aspects of Roman life. During this century Rome became a great world empire, and mistress of the whole Mediterranean world. Her ships plied the seas, her armies and governors ruled the land. The introduction of wealth, luxuries, and slaves from the new provinces, which followed their capture, soon had a very demoralizing influence upon the people. Private and public religion and morality rapidly declined; religion came to be an empty ceremonial; divorce became common; wealth and influence ruled the State; slaves became very cheap and abundant, and were used for almost every type of service. From a land of farmers of small farms, sturdy and self-supporting, who lived simply, reared large families, feared the gods, respected the State, and made an honest living, it became a land of great estates and wealthy men, and the self-respecting peasantry were transformed into soldiers for foreign wars, or joined the rabble in the streets of Rome. Wealth became the great desideratum, and the great avenue to this was through the public service, either as army commanders and governors, or as public men who could sway the multitude and command votes and influence. Manifestly the old type of education was not intended to meet such needs, and now in Rome, as previously in Athens, a complete transformation in the system of training for the young took place.

The Hellenization of Rome. The result was the Hellenization of the intellectual life of Rome, making complete the Hellenization of the Mediterranean world. After the fall of Greece, in 146

B.C., a great influx of educated Greeks took place. So completely did the Greek educational system seem to meet the needs of the changed Roman State that at first the Greek schools were adopted bodily — Greek language, pedagogue, higher schools of rhetoric and philosophy, and all — and the schools were in reality Greek schools but slightly modified to meet the needs of Rome. *Gymnasia* were erected, and wealthy Romans, as well as youths, began to spend their leisure in studying Greek and in trying to learn gymnastic exercises.

In time the national pride and practical sense of the Romans led them to open so-called "culture schools" of their own, modeled after the Greek. The Latin language then replaced the Greek as the vehicle of instruction, though Greek was still studied extensively, and Rome began the development of a system of private-school instruction possessing some elements that were native to Roman life and Roman needs.

IV. THE SCHOOL SYSTEM AS FINALLY ESTABLISHED

The ludus, or primary school. The elementary school, known as the *ludus*, or *ludus literarum*, the teacher of which was known as a *ludi magister*, was the beginning or primary school of the scheme as finally evolved. This corresponded to the school of the Athenian *grammatist*, and like it the instruction consisted of reading, writing, and counting. These schools were open to both sexes, but were chiefly frequented by boys. They were entered at the age of seven, sometimes six, and covered the period up to twelve. Reading and writing were taught by much the same methods as in the Greek schools, and approximately the same writing materials were used. Something of the same difficulty was experienced also in mastering the reading art (R. 22). Writing seems rather to have followed reading, and, as in the Greek schools, the pupils copied down from dictation and made their own books (*dictata*). Literature received no such emphasis in the elementary schools of Rome as in those

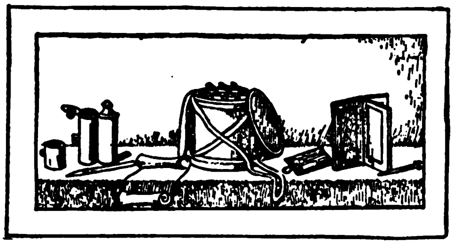

FIG. 9. ROMAN WRITING-MATERIALS
Inkstand, pen, letter, box of manuscripts, wax tablets, stylus.

of the Greeks, and the *palæstra* of the Greeks was not reproduced at Rome.

Due in part to the practical character of the Roman people, to the established habit of keeping careful household accounts, to the difficulties of their system of calculation, to the practice of finger reckoning, and to the vast commercial and financial interests that the Romans formed throughout the world which they conquered, arithmetic became a subject of fundamental importance in their schools, and much time was given to securing perfection in calculation and finger reckoning. Hence it occupied a place of large importance in the primary school. An abacus or counting-board was used, similar to the one shown in Figure 10, and Horace mentions a bag of stones (*calculi*) as a part of a schoolboy's equipment.

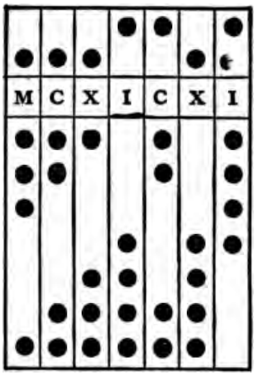

FIG. 10. A ROMAN COUNTING-BOARD

Pebbles were used, those nearest the numbered dividing partition being counted. Each pebble above when moved downward counted five of those in the same division below. The board now shows 8,760,254.

The *ludi magister*. The *ludi magister* at Rome held a position even less enviable than that held by the *grammatist* at Athens. "The starveling Greek," who was glad to barter his knowledge for the certainty of a good dinner, was sneered at by many Roman writers. Many slaves were engaged in this type of instruction, bringing in fees for their owners. It was not regarded as of importance that the teachers of these schools be of high grade. The establishment of and attendance at these primary schools was wholly voluntary, and the children in them probably represented but a small percentage of those of school age in the total population. These schools became quite common in the Italian cities, and in time were found in the provincial cities of the Empire as well. They remained, however, entirely private-adventure undertakings, the State doing nothing toward encouraging their establishment, supervising the instruction in them, or requiring attendance at them.

The schools were held anywhere — in a portico, in a shed or booth in front of a house, in a store, or in a recessed corner shut in by curtains. A chair for the master, benches for the pupils, an outer room for cloaks and for the pedagogues to wait in, and a bundle of rods (*ferula*) constituted the necessary equipment. The pupils brought with them boxes containing writing-materials, book-rolls, and reckoning-stones. Schools began early in the morning, pupils in winter going with lanterns to their tasks. There was much flogging of children, and in Martial we find an angry epigram which he addressed to a schoolmaster who disturbed his sleep (**R. 22 a**).

The secondary schools. Secondary or Latin grammar schools, under a *grammaticus*, and covering instruction from the age of twelve to sixteen, had become clearly differentiated from the primary schools under a *ludi magister* by the time of the death of Cato, 149 B.C. At first this higher instruction began in the form of private tutors, probably in the homes of the wealthy, and Greek was the language taught. By the beginning of the first century B.C., however, Latin secondary schools began to arise, and in time these too spread to all the important cities of the Empire. Attendance at them was wholly voluntary, and was confined entirely to the children of the well-to-do classes. The teachers were Greeks, or Latins who had been trained by the Greeks. Each teacher taught as he wished, but the schools throughout the Empire came to be much the same in character. The course of study consisted chiefly of instruction in grammar and literature, the purpose being to secure such a mastery of the Latin language and Greek and Latin literatures as might be most helpful in giving that broader culture now recognized as the mark of an educated man, and in preparing the young Roman to take up the life of an orator and public official (**R. 24**). Grammar, composition, elocution, ethics, history, mythology, and geography were all comprehended in the instruction in grammar and literature in the secondary schools. A little music was added at times, to help the pupil intone his reading and declamation. A little geometry and astronomy were also included, for their practical applications. The athletic exercises of the Greeks were rejected, as contributing to immorality and being a waste of time and strength. In a sense these schools were finishing schools for Roman youths who went to any school at all, much as are our high schools of to-day for the great bulk of American children. The schools were better housed than those of the *ludi*, and the masters were of a better quality and received larger fees. Like the elementary schools, the State exercised no supervision or control over these schools or the teachers or pupils in them.

The schools of rhetoric. Up to this point the schools established had been for practical and useful information (the primary schools) or cultural (the grammar or secondary schools). On top of these a higher and professional type of school was next developed, to train youths in rhetoric and oratory, preparatory to the great professions of law and public life at Rome. These schools were direct descendants of the Greek rhetorical schools, which evolved from the schools of the Sophists.

These schools, the teachers of which were known as *rhetors*, furnished a type of education representing a sort of collegiate education for the period. They were oratorical in purpose, because the orator had become the Roman ideal of a well-educated man (**R.** 24). During the life of the Republic the orator found many opportunities for the constructive use of his ability, and all young men ambitious to enter law or politics found the training of these schools a necessary prerequisite. They were attended for two or three years by boys over sixteen, but only the wealthier and more aristocratic families could afford to send their boys to them.

University learning. Roman youths desiring still further training could now journey to the eastward and attend the Greek universities. A few did so, much as American students in the middle of the nineteenth century went to Germany for higher study. Athens and Rhodes were most favored. Brutus, Horace, and Cicero, among others, studied at Athens; Cæsar, Cicero, and Cassius at Rhodes. Later Alexandria was in favor. In a library founded in the Temple of Peace by Vespasian (ruled 69 to 79 A.D.) the University at Rome had its origin, and in time this developed into an institution with professors in law, medicine, architecture, mathematics and mechanics, and grammar and rhetoric in both the Latin and Greek languages. In this many youths from provincial cities came to study. The lines of instruction represented nothing, however, in the way of scientific investigation or creative thought; the instruction was formal and dogmatic, being largely a further elaboration of what had previously been well done by the Greeks.

Nature of the educational system developed. Such was the educational system which was finally evolved to meet the new cultural needs of the Roman Empire. In all its foundation elements it was Greek. Having borrowed — conquered one might almost say — Greek religion, philosophy, literature, and learning, the Romans naturally borrowed also the school system that had been evolved to impart this culture. Never before or since has any people adapted so completely to their own needs the system of educational training evolved by another. To the Greek basis some distinctively Roman elements were added to adapt it better to the peculiar needs of their own people, while on the other hand many of the finer Greek characteristics were omitted entirely. Having once adopted the Greek plan, the constructive Roman mind organized it into a system superior to the original, but in so doing formalized it more than the Greeks had ever done (R. 19).

18 or 19 to 21 & 25	University	(Greek Universities) University of Rome (Professor)	Law Medicine Architecture Mathematics Grammar Rhetoric
16 to 18 or 19	Collegiate	Schools of Rhetoric (Rhetor)	Grammar Rhetoric Dialectic Law
12 to 16	Secondary	Latin Grammar Schools (Grammaticus)	Grammar and Literature
6 or 7 to 12	Elementary	Ludi, or Primary Schools (Ludi magister)	Reading Writing Reckoning

FIG. 11. THE ROMAN VOLUNTARY EDUCATIONAL SYSTEM, AS FINALLY EVOLVED

The schools reached but a small, selected class of youths, trained for only the political career, and cannot be considered as having been general or as having educated any more than a small percentage of the future citizens of the State. Many of the important lines of activity in which the Romans engaged, and which to-day are regarded as monuments to their constructive skill and practical genius, such as architectural achievements, the building of roads and aqueducts, the many skilled trades, and the large commercial undertakings, these schools did nothing to prepare youths for. The State, unlike Athens, never required education of any one, did not make what was offered a preparation for citizenship, and made no attempt to regulate either teachers or instruction until late in the history of the Empire. Education at Rome was from the first purely a private-adventure affair, most nearly analogous with us to instruction in music and dancing. Those who found the education offered of any value could take it and pay for it; those who did not could let it alone. A few did the former, the great mass of the Romans the latter. For the great slave class that developed at Rome there was, of course, *no education at all*.

Results on Roman life and government. Still, out of this private and tuition system of schools many capable political leaders and executives came — men who exercised great influence on the history of the State, fought out her political battles, organized and directed her government at home and in the provinces, and helped build up that great scheme of government and law and order which was Rome's most significant contribution to future civilization. It was in this direction, and in practical and constructive work along engineering and architectural lines, that Rome excelled. The Roman genius for government and law and order and constructive undertakings must be classed, in importance for the future of civilization in the world, along with the ability of Greece in literature and philosophy and art.

The conquest of the known world by this practical and constructive people could not have otherwise than decisively influenced the whole course of human history, and, coming at the time in world affairs that it did, the influence on all future civilization of the work of Rome has been profound. The great political fact which dominated all the Middle Ages, and shaped the religion and government and civilization of the time, was the fact that the Roman Empire had been and had done its work so well.

V. ROME'S CONTRIBUTION TO CIVILIZATION

Greece and Rome contrasted. The contrast between the Greeks and the Romans is marked in almost every particular. The Greeks were an imaginative, subjective, artistic, and idealistic people, with little administrative ability and few practical tendencies. The Romans, on the other hand, were an unimaginative, concrete, practical, and constructive nation. Greece made its great contribution to world civilization in literature and philosophy and art; Rome in law and order and government. The Greeks lived a life of æsthetic enjoyment of the beautiful in nature and art, and their basis for estimating the worth of a thing was intellectual and artistic; to the Romans the æsthetic and the beautiful made little appeal, and their basis for estimating the worth of a thing was utilitarian. The Greeks worshiped "the beautiful and the good," and tried to enjoy life rationally and nobly, while the Romans worshiped force and effectiveness, and lived by rule and authority. The Greeks thought in personal terms of government and virtue and happiness, while the Romans thought in general terms of law and duty, and their happiness was rather in present denial for future gain than in any immediate enjoyment.

As a result the Romans developed no great scholarly or literary atmosphere, as the Greeks had done at Athens. They built up no great speculative philosophies, and framed no great theories of government. Even their literature was, in part, an imitation of the Greek, though possessing many elements of native strength and beauty. They were a people who knew how to accomplish results rather than to speculate about means and ends. Usefulness and effectiveness were with them the criteria of the worth of any idea or project. They subdued and annexed an empire, they gave law and order to a primitive world, they civilized and Romanized barbarian tribes, they built roads connecting all parts of their Empire that were the best the world had ever known, their aqueducts and bridges were wonders of engineering skill, their public buildings and monuments still excite admiration and envy, in many of the skilled trades they developed tools and processes of large future usefulness, and their agriculture was the best the world had known up to that time. They were strong where the Greeks were weak, and weak where the Greeks were strong.

By reason of this difference the two peoples supplemented one another well in the work of laying the foundations upon which our modern civilization has been built. Greece created the intellectual and æsthetic ideals and the culture for our life, while Rome developed the political institutions under which ideals may be realized and culture may be enjoyed. From the Greeks and Hebrews our modern life has drawn its great inspirations and its ideals for life, while from the Romans we have derived our ideals as to government and obedience to law. One may say that the Romans as a people specialized in government, law, order, and constructive practical undertakings, and bequeathed to posterity a wonderful inheritance in governmental forms, legal codes, commercial processes, and engineering undertakings, while the Greeks left to us a philosophy, literature, art, and a world culture which the civilized world will never cease to enjoy. The Greeks were an imaginative, impulsive, and a joyous people; the Romans sedate, severe, and superior to the Greeks in persistence and moral force. The Greeks were ever young; the Romans were always grown and serious men.

Rome's great contribution. Rome's great contribution, then, was along the lines just indicated. To this, the school system which became established in the Roman State contributed only indirectly and but little. The unification of the ancient world into one Empire, with a common body of traditions, practices, coinage, speech, and law, which made the triumph of Christianity possible; the formulation of a body of law which barbarian tribes accepted, which was studied throughout the Middle Ages, which formed the basis of the legal system of the mediæval Church, and which has largely influenced modern practice; the development of a language from which many modern tongues have been derived, and which has modified all western languages; and the perfection of an alphabet which has become the common property of all nations whose civilization has been derived from the Greek and Roman — these constitute the chief contributions of Rome to modern civilization.

Of all the Roman contributions to modern civilization perhaps the one that most completely permeates all our modern life is their alphabet and speech. This alphabet they obtained from the Greek colonies in southern Italy, and the Greeks obtained it from the still earlier Phœnicians. It has become the common property of almost all the civilized world. In speech, the French, Spanish, Portuguese, and Italian tongues go back directly to the Latin, and these are the tongues of Mexico and South America as well. The English language, which is spoken throughout a large part of the civilized world, and by one third of its inhabitants, has also received so many additions from Romanic sources that we to-day scarcely utter a sentence without using some word once used by the citizens of ancient Rome.

Among the smaller but nevertheless important contributions which we owe to Rome, and which were passed on to mediæval and modern Europe, should be mentioned certain practical knowledge in agriculture and the mechanic arts; many inventions and acquired skills in the arts and trades; an organized sea and land trade and commerce; cleared and improved lands, good houses, roads and bridges; great architectural and engineering remains, scattered all through the provinces; the beginnings of the transformation of the slave into the serf, from which the great body of freemen of modern Europe later were evolved; and certain educational conceptions and practices which later profoundly influenced educational methods and procedure. How large these contributions were we shall appreciate better as we proceed with our history.

The way paved for Christianity. It was the great civilizing and unifying work of the Roman State that paved the way for the next great contribution to the foundations of the structure of our modern civilization — the contribution of Christianity. Had Italy never been consolidated; had the barbarian tribes to the north never been conquered and Romanized; had Spain and Africa and the eastern Mediterranean never known the rule of Rome; had the Latin language never become the speech of the then civilized peoples; had Roman armies never imposed law and order throughout an unruly world; had Roman governors and courts never established common rights and security; had Roman municipal government never come to be the common type in the cities of the provinces; had Roman schools in the provincial cities never trained the foreign citizen in Roman ways and to think Roman thoughts; had Rome never established free trade and intercourse throughout her Empire; had Rome never developed processes and skills in agriculture and the creative arts; had there been no Roman roads and common coinage; and had Rome not done dozens of other important things to unify and civilize Europe and reduce it to law and order, it is hard to imagine the chaos that would have resulted when the Empire gave way to the barbarian hordes which finally overwhelmed it. Where we should have been to-day in the upward march of civilization, without the work of Rome, it is impossible to say.

QUESTIONS FOR DISCUSSION

1. Contrast the Romans as a colonizing power with the modern Germans. The English. The French.
2. At what period in our national development did home education with us occupy substantially the same place as it did in Rome before 300 B.C.? In what respects was the education given boys and girls similar? Different?
3. What was the most marked advance over the Greeks in the early Roman training?
4. Contrast the education of the Athenian, Spartan, and Roman boy, during the early period in each State.
5. To what extent does early Roman education indicate the importance of the parent and of study of biography in the education of the young?
6. Was the change in character of the education of Roman youths, after the expansion of the Roman State and the establishment of world contacts, preventable, or was it a necessary evolution? Why? Have we ever experienced similar changes?
7. As a State increases in importance and enlarges its world contacts, is a correspondingly longer training and enlarged culture necessary at home?
8. What idea do you get as to the extent to which the Latinized Odyssey

was read from the fact that the Latin language was crystallized in form shortly after the translation was made?

9. What does the rapid adoption of the Greek educational system, and the later evolution of a native educational system out of it, indicate as to the nature of Roman expansion?
10. Was the introduction of the Greek *pedagogue* as a fashionable adjunct natural? Why?
11. Why is a period of very rapid expansion in a State likely to be demoralizing? How may the demoralization incident to such expansion be anticipated and minimized?
12. Why does the coming of large landed estates introduce important social problems? Have we the beginnings of a social problem of this type? What correctives have we that Rome did not have?
13. State the economic changes which hastened the introduction of a new type of higher training at Rome.
14. Was the Hellenization of Rome which ensued a good thing? Why?
15. How do you account for Rome not developing a state school system in the period of great national need and change, instead of leaving the matter to private initiative? Do you understand that any large percentage of youths in the Roman State ever attended any school?
16. Why do older people usually oppose changes in school work manifestly needed to meet changing national demands?
17. Compare the difficulties met with in learning to read Greek and Latin. Either and English.
18. How do you account for the much smaller emphasis on literature and music in the elementary instruction at Rome than at Athens? How for the much larger emphasis on formal grammar in the secondary schools at Rome?
19. What subjects of study as we now know them were included in the Roman study of grammar and rhetoric?
20. How do you explain the greater emphasis placed by the Romans on secondary education than on elementary education?
21. What particular Roman need did the higher schools of oratory and rhetoric supply?
22. What does the exclusive devotion of these schools to such studies indicate as to professional opportunities at Rome?
23. How do you account for the continuance of these schools in favor, and for the aid and encouragement they received from the later Emperors, when the very nature of the Empire in large part destroyed the careers for which they trained?
24. Compare Rome and the United States in their attitudes toward foreign-born peoples.

SELECTED READINGS

In the accompanying *Book of Readings* the following selections are reproduced:

12. The Laws of the Twelve Tables.
13. Cicero: Importance of the Twelve Tables in Education.
14. Schreiber: A Roman Farmer's Calendar.
15. Polybius: The Roman Character.
16. Mommsen: The Grave and Severe Character of the Earlier Romans.
17. Epitaph: The Education of Girls.
18. Marcus Aurelius: The Old Roman Education described.
19. Tacitus: The Old and the New Education contrasted.

20. Suetonius: Attempts to Prohibit the Introduction of Greek Higher Learning.
  (*a*) Decree of the Roman Senate, 161 B.C.
  (*b*) Decree of the Censor, 92 B.C.
21. Vergil: Difficulty experienced in Learning to Read.
22. Horace: The Education given by a Father.
23. Martial: The Ludi Magister.
  (*a*) To the Master of a Noisy School.
  (*b*) To a Schoolmaster.
24. Cicero: Oratory the Aim of Education.
25. Quintilian: On Oratory.
26. Constantine: Privileges granted to Physicians and Teachers.

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* Adams, G. B. *Civilization during the Middle Ages.*
Anderson, L. F. "Some Facts regarding Vocational Education among the Greeks and Romans"; in *School Review*, vol. 20, pp. 191–201.
* Clarke, Geo. *Education of Children at Rome.*
* Dill, Sam'l. *Roman Society in the Last Century of the Western Empire.*
* Laurie, S. S. *Historical Survey of Pre-Christian Education.*
Mahaffy, J. P. *The Silver Age of the Greek World.*
Ross, W. F. "The Strength and Weakness of Roman Education"; in *School and Society*, vol. 6, pp. 457–63.
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CHAPTER IV

THE RISE AND CONTRIBUTION OF CHRISTIANITY

THE RISE AND VICTORY OF CHRISTIANITY

Religions in the Roman world. As was stated in the preceding chapter (p. 30), the Roman state religion was an outgrowth of the religion of the home. Just as there had been a number of fireside deities, who were supposed to preside over the different activities of the home, so there were many state deities who were supposed to preside over the different activities of the State. In addition, the Romans exhibited toward the religions of all other peoples that same tolerance and willingness to borrow which they exhibited in so many other matters. Certain Greek deities were taken over and temples erected to them in Rome, and new deities, to guard over such functions as health, fortune, peace, concord, sowing, reaping, etc., were established. Extreme tolerance also was shown toward the special religions of other peoples who had been brought within the Empire, and certain oriental divinities had even been admitted and given their place in Rome.

Like many other features of Roman life, their religion was essentially of a practical nature, dealing with the affairs of everyday life, and having little or no relation to personal morality. It promised no rewards or punishments or hopes for a future life, but rather, by uniting all citizens in a common reverence and fear of certain deities, helped to unify the Empire and hold it together. After the death of Augustus (14 A.D.), the Roman Senate deified the Emperor and enrolled his name among the gods, and Emperor worship was added to their ceremonies. This naturally spread rapidly throughout the Empire, tended to unite all classes in allegiance to the central government at Rome, and seemed to form the basis for a universal religion for a universal empire.

Feeling of need for something more. As an educated class arose in Rome, this mixture of diverse divinities failed to satisfy; the Roman religion, made up as it was of state and parental duties and precautions, lost with them its force; and the religious ceremonies of the home and the State lost for them their meaning. The mechanical repetition of prayers and sacrifices made no appeal to the emotions or to the moral nature of individuals, and offered no spiritual joy or consolation as to a life beyond. The educated Greeks before had had this same feeling, and had indulged in much speculation as to the moral nature of man. Many educated Romans now turned to the Greek philosophers for some more philosophical explanation of the great mystery of life and death.

Where this new religion arose. Far to the eastern end of the Mediterranean there had long lived a branch of the Semitic race, which had developed a national character and made a contribution of first importance to the religious thought of the world. These were the Hebrew people who, leaving Egypt about 1500 B.C., in the Exodus, had come to inhabit the land of Canaan, south of Phœnicia and east and north of Egypt. From a wandering, pastoral people they had gradually changed to a settled, agricultural people, and had begun the development of a regular State. Unwilling, however, to bear the burdens of a political State, and objecting to taxation, a standing army, and forced labor for the State, the nationality which promised at one time fell to pieces, and the land was overrun by hostile neighbors and the people put under the yoke. After a sad and tempestuous history, which culminated in the destruction of Jerusalem by the Romans in 70 A.D., the inhabitants were sold into slavery and dispersed throughout the Roman Empire.

These people developed no great State, and made no contributions to government or science or art. Their contribution was along religious lines, and so magnificent and uplifting is their religious literature that it is certain to last for all time. Alone among all eastern people they early evolved the idea of one omnipotent God. The religion that they developed declared man to be the child of God, erected personal morality and service to God as the rule of life, and asserted a life beyond the grave. It was about these ideas that the whole energy of the people concentrated, and religion became the central thought of their lives. This religion, unlike the other religions of the Mediterranean world, emphasized duty to God, service, personal morality, chastity, honesty, and truth as its essential elements. The Law of Moses became the law of the land. Woman was elevated to a new place in the life of the ancient world. Children became sacred in the eyes of the people. Their literary contribution, the Old Testament — written by a series of patriarchs, lawgivers, prophets, and priests — pictures, often in sublime language, the various migrations, deliverances, calamities, religious hopes, aspirations, and experiences of this Chosen People.

The unity of this people. Just before their country was overrun and they were carried captive to Babylon, in 588 B.C., the Pentateuch had been reduced to writing and made an authoritative code of laws for the people. This served as a bond of union among them during the exile, and after their return to Palestine, in 538 B.C., the study and observance of this law became the most important duty of their lives. The synagogue was established in every village for its exposition, where twice on every Sabbath day the people were to gather to hear the law expounded. A race of *Scribes*, or scripture scholars, also arose to teach the law, as well as means for educating additional scribes. They were to interpret the law, and to apply it to the daily lives of the people.

Realizing, after the return from captivity, that the future existence of the Hebrew people would depend, not upon their military strength, but upon their moral unity, and that this must be based upon the careful training of each child in the traditions of his fathers, the leaders of the people began the evolution of a religious school system to meet the national need. Realizing, too, that parents could not be depended upon in all cases to provide this instruction, the leaders provided it and made it compulsory. Great open-air Bible classes were organized at first, and these were gradually extended to all the villages of the country. Elementary schools were developed later and attached to the synagogues, and finally, in 64 A.D., the high priest, Joshua ben Gamala, ordered the establishment of an elementary school in every village, made attendance compulsory for all male children, and provided for a combined type of religious and household instruction at home for all girls. Reading, writing, counting, the history of the Chosen People, the poetry of the Psalms, the Law of the Pentateuch, and a part of the Talmud constituted the subject-matter of instruction. The instruction was largely oral, and learning by heart was the common teaching plan. The child was taught the Law of his fathers, trained to make holiness a rule of his life and to subordinate his will to that of the one God, and commanded to revere his teachers (**R.** 27) and uphold the traditions of his people.

After the destruction of Jerusalem (70 A.D.) and the scatterment of the people, the school instruction was naturally more or less disrupted, but in one way or another the Hebrew people have ever since managed to keep up the training of rabbis and the instruction of the young in the Law and the traditions of their people, and as a consequence of this instruction we have to-day the interesting result of a homogeneous people who, for over eighteen centuries, have had no national existence, and who have been scattered and persecuted as have no other people. History offers us no better example of the salvation of a people by means of the compulsory education of all.

The new Christian faith. It was into this Hebrew race that Jesus was born, and there he lived, learned, taught, made his disciples, and was crucified. Building on the old Hebrew moral law and the importance of the personal life, Jesus made his appeal to the individual, and sought the moral regeneration of society through the moral regeneration of individual men and women. This idea of individuality and of personal souls worth saving was a new idea in a world where the submergence of the individual in the State had everywhere up to that time been the rule. Even the Hebrews, in their great desire to perpetuate their race and faith, had suppressed and absorbed the individual in their religious State. The teachings of Jesus, on the other hand, with their emphasis on charity, sympathy, self-sacrifice, and the brotherhood of all men, tended to obliterate nationality, while the emphasis they gave to the future life, for which life here was but a preparation, tended to subordinate the interests of the State and withdraw the concern of men from worldly affairs. In a series of simple sermons, Jesus set forth the basis of this new faith which he, and after him his disciples, offered to the world.

The challenge of Christianity. Into a Roman world that had already passed the zenith of its greatness came this new Christian faith, challenging almost everything for which the Roman world had stood. In place of Roman citizenship and service to the State as the purpose of life, the Christians set up the importance of the life to come. Instead of pleasure and happiness and the satisfaction of the senses as personal ends, the Christians preached denial of all these things for the greater joy of a future life. In a society built on a huge basis of slavery and filled with social classes, the Christians proclaimed the equality of all men before God. To a nation in which family life had become corrupt, infidelity and divorce common, and infanticide a prevailing practice, the Christians proclaimed the sacredness of the marriage tie and the family life, and the exposure of infants as simple murder. In place of the subjection of the individual to the State, the Christians demanded the subjection of the individual only to God. In place of a union of State and religion, the Christians demanded the complete separation of the two and the subordination of the State to the Church. Unlike all other religions that Rome had absorbed, the Christians refused to be accepted on any other than exclusive terms. The worship of all other gods the Christians held to be sinful idol-worship, a deadly sin in the eyes of God, and they were willing to give up their lives rather than perform the simplest rite of what they termed pagan worship (R. 28). To the deified Emperor the Christians naturally could not bend the knee (Rs. 30 b, 31 a-b, 34).

The victory of Christianity. By the close of the first century there were Christian churches throughout most of Judea and Asia Minor, and in parts of Greece and Macedonia. During the second century other churches were established in Asia Minor, in Greece, and along the Black Sea, and at a few places in Italy and France; and before four centuries had elapsed from the crucifixion Christian churches had been established throughout almost all the Roman world. The unity in government that Rome had everywhere established; the Roman peace (*pax Romana*) that Rome had everywhere imposed; the spread of the Greek and Latin languages and ideas throughout the Mediterranean world; the right of freedom of travel and speech enjoyed by a Roman citizen, and of which Saint Paul and others on their travels took advantage; the scatterment of Jews throughout the Empire, after the destruction of Jerusalem in 70 A.D. — all these elements also helped.

That Christianity made its headway unmolested must not be supposed. While at first the tendency of educated Romans and of the government was to ignore or tolerate it, its challenge was so direct and provocative that this attitude could not long continue. In the first century the Christians had been largely ignored. In the second, in some places, they were punished. In the third century, impelled by the calamities of the State and the urging of those who would restore the national religion to its earlier position, the Emperors were gradually driven to a series of heavy persecutions of the sect (R. 30 a). But it had now become too late. The blood of the martyrs proved to be the seed of the Church (R. 35). The last great persecution under the Emperor Diocletian, in 303 (**R. 33**), ended in virtual failure. In 311 the Emperor Galerius placed Christianity on a plane of equality with other forms of worship (**R. 36**). In 313 Constantine made it in part the official religion of the State, and ordered freedom of worship for all. He and succeeding Emperors gradually extended to the Christian clergy a long list of important privileges (**R. 38**) and exemptions, analogous to those formerly enjoyed by the teachers of rhetoric under the Empire (**R. 26**), and likewise began the policy, so liberally followed later, of endowing the Church. In 391 the Emperor Theodosius forbade all pagan worship, thus making the victory of Christianity complete. In less than four centuries from the birth of its founder the Christian faith had won control of the great Empire in which it originated. In 529 the Emperor Justinian ordered the closing of all pagan schools, and the University of Athens, which had remained the center of pagan thought after the success of Christianity, closed its doors. The victory was now complete.

The contribution of Christianity. We have now before us the third great contribution upon which our modern civilization has been built. To the great contributions of Greece and Rome, which we have previously studied, there now was added, and added at a most opportune time, the contribution of Christianity. In taking the Jewish idea of one God and freeing it from the narrow tribal limitations to which it had before been subject, Christianity made possible its general acceptance, first in the Roman world, and later in the Mohammedan world. With this was introduced the doctrine of the fatherhood of God and his love for man, the equality before God of all men and of the two sexes, and the sacredness of each individual in the eyes of the Father. An entirely new conception of the individual was proclaimed to the world, and an entirely new ethical code was promulgated. The duty of all to make their lives conform to these new conceptions was asserted. These ideas imparted to ancient society a new hopefulness and a new energy which were not only of great importance in dealing with the downfall of civilization and the deluge of barbarism which were impending, but which have been of prime importance during all succeeding centuries. In time the church organization which was developed gradually absorbed all other forms of government, and became virtually the State during the long period of darkness known as the Middle Ages.

It remains now to sketch briefly how the Church organized itself and became powerful enough to perform its great task during the Middle Ages, what educational agencies it developed, and to what extent these were useful.

II. EDUCATIONAL AND GOVERNMENTAL ORGANIZATION OF THE EARLY CHURCH

Schooling of the early Church; catechumenal instruction. The early churches were bound together by no formal bond of union, and felt little need for such. It was the belief of many that Christ would soon return and the world would end, hence there was little necessity for organization. There was also almost no system of belief. An acknowledgment of God as the Father, a repentance for past sins, a godly life, and a desire to be saved were about all that was expected of any one. The chief concern was the moral regeneration of society through the moral regeneration of converts. To accomplish this, in face of the practices of Roman society, a process of instruction and a period of probation for those wishing to join the faith soon became necessary. Jews, pagans, and the children of believers were thereafter alike subjected to this before full acceptance into the Church. At stated times during the week the probationers met for instruction in morality and in the psalmody of the Church (R. 39). These two subjects constituted almost the entire instruction, the period of probation covering two or three years. The teachers were merely the older and abler members of the congregation. This personal instruction became common everywhere in the early Church, and the training was known as *catechumenal*, that is, rudimentary, instruction.

Catechetical schools. After Christianity had begun to make converts among the more serious-minded and better-educated citizens of the Roman Empire, the need for more than rudimentary instruction in the principles of the church life began to be felt. Especially was this the case in the places where Christian workers came in contact with the best scholars of the Hellenic learning, and particularly at Alexandria, Athens, and the cities of Asia Minor. The speculative Greek would not be satisfied with the simple, unorganized faith of the early Christians. He wanted to understand it as a system of thought, and asked many questions that were hard to answer. To meet the critical inquiry of learned Greeks, it became desirable that the clergy of the

Church, in the East at least, should be equipped with a training similar to that of their critics. As a result there was finally evolved, first at Alexandria, and later at other places in the Empire, training schools for the leaders of the Church. These came to be known as *catechetical* schools, from their oral questioning method of instruction, and this term was later applied to elementary religious instruction (whence *catechism*) throughout western Europe.

Rejection of pagan learning in the West. In the West, where the leaders of the Church came from the less philosophic and more practical Roman stock, and where the contact with a decadent society wakened a greater reaction, the tendency was to reject the Hellenic learning, and to depend more upon emotional faith and the enforcement of a moral life. By the close of the third century the hostility to the pagan schools and to the Hellenic learning had here become pronounced (**R. 41**).

As a result Hellenic learning declined rapidly in importance in the West as the Church attained supremacy, and finally, in 401, the Council of Carthage, largely at the instigation of Saint Augustine, forbade the clergy to read any pagan author. In time Greek learning largely died out in the West, and was for a time almost entirely lost. Even the Greek language was forgotten, and was not known again in the West for nearly a thousand years.

The Church perfects a strong organization. As was previously stated (p. 50), but little need was felt during the first two centuries for a system of belief or church government. As the expected return of Christ did not take place, and as the need for a formulation of belief and a system of government began to be felt, the next step was the development of these features. The system of belief and the ceremonials of worship finally evolved are more the products of Greek thought and practices of the East, while the form of organization and government is derived more from Roman sources. In the second century the Old Testament was translated into Greek at Alexandria, and the "Apostles' Creed" was formulated. During the third century the writings deemed sacred were organized into the New Testament, also in Greek. In 325 the first General Council of the Church was held at Nicæa, in Asia Minor. It formulated the Nicene Creed (**R. 42**), and twenty canons or laws for the government of the Church. A second General Council, held at Constantinople in 381, revised the Nicene Creed and adopted additional canons.

FIG. 12.
A BISHOP
Seventh Century
(Santo Venanzio, Rome)

The great organizing genius of the western branch of the Church was Saint Augustine (354-430). He gave to the Western or Latin Church, then beginning to take on its separate existence, the body of doctrine needed to enable it to put into shape the things for which it stood. The system of theology evolved before the separation of the eastern and western branches of the Church was not so finished and so finely speculative as that of the Greek branch, but was more practical, more clearly legal, and more systematically organized.

The influence of Rome was strong also in the organization of the system of government finally adopted for the Church. There being no other model, the Roman governmental system was copied. The bishop of a city corresponded to the Roman municipal officials; the archbishop of a territory to the governor of a province; and the patriarch to the ruler of a division of the Empire. As Rome had been a universal Empire, and as the city of Rome had been the chief governing city, the idea of a universal Church was natural and the supremacy of the Bishop of Rome was gradually asserted and determined.

A State within a State. There was thus developed in the West, as it were a State within a State. That is, within the Roman Empire, with its Emperor, provincial governors, and municipal officials, governing the people and drawing their power from the Roman Senate and imperial authority, there was also gradually developed another State, consisting of those who had accepted the Christian faith, and who rendered their chief allegiance, through priest, bishop, and archbishop, to a central head of the Church who owed allegiance to no earthly ruler. That Christianity, viewed from the governmental point of view, was a serious element of weakness in the Roman State and helped its downfall, there can be no question. In the eastern part of the Empire the Church was always much more closely identified with the State. Fortunately for civilization, before the Roman Empire had fallen and the impending barbarian deluge had descended, the Christian Church had succeeded in formulating a unifying belief and a form of government capable of commanding respect and of enforcing authority, and was fast taking over the power of the State itself.

The cathedral or episcopal schools. The first churches throughout the Empire were in the cities, and made their early converts there. Gradually these important cities evolved into the residences of a supervising priest or bishop, the territory became known as a *bishopric*, and the church as a *cathedral church*. In time, also, some of the outlying territory was organized into parishes, and churches were established in these. These were made tributary to and placed under the direction of the bishop of the large central city. To supply clergy for these outlying parishes came to be one of the functions of the bishop, and, to insure properly trained clergy and to provide for promotions in the clerical ranks, schools of a rudimentary type were established in connection with the cathedral churches. These came to be known as *cathedral*, or *episcopal* schools. At first they were probably under the immediate charge of the bishop, but later, as his functions increased, the school was placed under a special teacher, known as a *Scholasticus*, or *Magister Scholarum*, who directed the cathedral school, assisted the bishop, and trained the future clergy. As the pagan secondary schools died out, these cathedral schools, together with the monastic schools which were later founded, gradually replaced the pagan schools as the important educational institutions of the western world. In these two types of schools the religious leaders of the early Middle Ages were trained.

The monastic organization. In the early days of Christianity, it will be remembered (p. 48), the Christian convert held himself apart from the wicked world all about him, and had little to do with the society or the government of his time. He regarded the Church as having no relationship to the State. As the Church grew stronger, however, and became a State within a State, the Christian took a larger and larger part in the world around him, and in time came to be distinguished from other men by his profession of the Christian religion rather than by any other mark. Many of the early bishops were men of great political sagacity, fully capable of realizing to the full the political opportunities, afforded by their position, to strengthen the power of the Church. It was the work of men of this type that created the temporal power of the Church, and made of it an institution capable of commanding respect and enforcing its decisions.

To some of the early Christians this life did not appeal. To them holiness was associated with a complete withdrawal from contact with this sinful world and all its activities. Some betook themselves to the desert, others to the forests or mountains, and others shut themselves up alone that they might be undisturbed in their religious meditations. To such devoted souls monasticism, a scheme of living brought into the Christian world from the East, made a strong appeal. It provided that such men should live together in brotherhoods, renouncing the world, taking vows of poverty, chastity, and obedience, and devoting their lives to hard labor and the mortification of the flesh that the soul might be exalted and made beautiful. The members lived alone in individual cells, but came together for meals, prayer, and religious service.

As early as 330 a monastery had been organized on the island of Tebernæ, in the Nile. About 350 Saint Basil introduced monasticism into Asia Minor, where it flourished greatly. In 370 the Basilian order was founded. The monastic idea was soon transferred to the West, a monastery being established at Rome probably as early as 340. The monastery of Saint Victor, at Marseilles, was founded by Cassian in 404, and this type of monastery and monastic rule was introduced into Gaul, about 415. The monastery of Lerins (off Cannes, in southern France) was established in 405. During the fifth century a rapid extension of monastic foundations took place in western Europe, particularly along the valleys of the Rhone and the Loire in Gaul. In 529 Saint Benedict, a Roman of wealth who fled from the corruption of his city, founded the monastery of Monte Cassino, south of Rome, and established a form of government, or rule of daily life, which was gradually adopted by nearly all the monasteries of the West. In time Europe came to be dotted with thousands of these establishments, many of which were large and expensive institutions both to found and to maintain. By the time the barbarian invasions were in full swing monasticism had become an established institution of the Christian Church. Nunneries for women also were established early.

Monastic schools. Poverty, chastity, obedience, labor, and religious devotion were the essential features of a monastic life. The Rule of Saint Benedict (**R.** 43) organized in a practical way the efforts of those who took the vows. In a series of seventy-three rules which he laid down, covering all phases of monastic life, the most important from the standpoint of posterity was the forty-eighth, prescribing at least seven hours of daily labor and two hours of reading "for all able to bear the load." From that part of the rule requiring regular manual labor the monks became the most expert farmers and craftsmen of the early Middle Ages, while to the requirement of daily reading we owe in large part the development of the school and the preservation of learning in the West during the long intellectual night of the mediæval period (**R.** 44).

Into these monastic institutions the *oblati*, that is, those who wished to become monks, were received as early as the age of twelve, and occasionally earlier (**R.** 53 **a**). The final vows (**R.** 53 **b**) could not be taken until eighteen, so during this period the novice was taught to work and to read and write, given instruction in church music, and taught to calculate the church festivals and to do simple reckoning. In time some condensed and carefully edited compendium of the elements of classical learning was also studied, and still later a more elaborate type of instruction was developed in some of the monasteries. This, however, belongs to a later division of this history, and further description of church and monastic education will be deferred until we study the intellectual life of the Middle Ages.

The education of girls. Aside from the general instruction in the practices of the church and home instruction in the work of a woman, there was but little provision made for the education of girls not desiring to join a convent or nunnery. A few, however, obtained a limited amount of intellectual training. The letter of Saint Jerome to the Roman lady Paula (**R.** 45), regarding the education of her daughter, is a very important document in the history of early Christian education for girls. Dating from 403, it outlines the type of training a young girl should be given who was to be properly educated in Christian faith and properly consecrated to God. What he outlined was education for nunneries, a number of which had been founded in the East and a few in the West. In the West these institutions later experienced an extensive development, and offered the chief opportunity for any intellectual education for women during the whole of the Middle Ages.

III. WHAT THE MIDDLE AGES STARTED WITH

What the Church brought to the Middle Ages. From a small and purely spiritual organization, devoting its energies to exhortation and to the moral regeneration of mankind, and without creed or form of government, as the Christian Church was in the first two centuries of its development, we have traced the organization of a body of doctrine, the perfection of a strong system of church government, and the development of a very limited educational system designed merely to train leaders for its service. We have also shown how it added to its early ecclesiastical organization a strong governmental organization, became a State within a State, and gradually came to direct the State itself. It was thus ready, when the virtual separation of the Roman Empire into an eastern and western division took place, in 395, and when the western division finally fell before the barbarian onslaughts, to take up in a way the work of the State, force the barbarian hordes to acknowledge its power, and begin the process of civilizing these new tribes and building up once more a civilization in the western world. In addition to its spiritual and political power, the Church also had developed, in its catechumenal instruction and in the cathedral and monastic schools, a very meager form of an educational system for the training of its future leaders and servants. A great change had now taken place in the nature of education as a preparation for life, and intellectual education, in the sense that it was known and understood in Greece and Rome, was not to be known again in the western world for almost a thousand years. The distinguishing characteristic of the centuries which follow, up to the Revival of Learning, are, first, a struggle against very adverse odds to prevent civilization from disappearing entirely, and later a struggle to build up new foundations upon which world civilization might begin once more where it had left off in Greece and Rome.

The three great contributions from the ancient world. Thus, before the Middle Ages began, the three great contributions of the ancient world which were to form the foundations of our future western civilization had been made. Greece gave the world an art and a philosophy and a literature of great charm and beauty, the most advanced intellectual and æsthetic ideas that civilization has inherited, and developed an educational system of wonderful effectiveness — one that in its higher development in time took captive the entire Mediterranean world and profoundly modified all later thinking. Rome was the organizing and legal genius of the ancient world, as Greece was the literary and philosophical. To Rome we are especially indebted for our [illegible]ptions of law, order, and government, and for the ability [illegible] practical and carry into effect the ideals of other peoples.

To the Hebrews we are indebted for the world's loftiest conceptions of God, religious faith, and moral responsibility, and to Christianity and the Church we are indebted for making these ideas universal in the Roman Empire and forcing them on a barbaric world.

All these great foundations of our western civilization have not come down to us directly. The hostility to pagan learning that developed on the part of the Latin Fathers; the establishment of an eastern capital for the Empire at Constantinople, in 328; the virtual division of the Empire into an East and West, in 395; and the final division of the Christian Church into a Western Latin and an Eastern Greek Church, which was gradually effected, finally drove Greek philosophy and learning and the Greek language from the western world. Greek was not to be known again in the West for hundreds of years. Fortunately the Eastern Church was more tolerant of pagan learning than was the Western, and was better able to withstand conquest by barbarian tribes. In consequence what the Greeks had done was preserved at Constantinople until Europe had once more become sufficiently civilized and tolerant to understand and appreciate it. Hellenic learning was then handed back to western Europe, first through the medium of the Saracens, and then in that great Revival of Learning which we know as the *Renaissance*.

The future story. For the long period of intellectual stagnation which now followed, the educational story is briefly told. But little formal education was needed, and that of but one main type. It was only after the Church had won its victory over the barbarian hordes, and had built up the foundations upon which a new civilization could be developed, that education in any broad and liberal sense was again needed. This required nearly a thousand years of laborious and painful effort. Then, when schools again became possible and learning again began to be demanded, education had to begin again with the few at the top, and the contributions of Greece and Rome had to be recovered and put into usable form as a basis upon which to build. It is only very recently that it has become possible to extend education to all.

In Part II we shall next trace briefly the intellectual life of the Middle Ages, and the reawakening, and in Part III we shall, among other things, point out the deep and lasting influence of the work of these ancient civilizations on our modern educational thoughts and practices.

QUESTIONS FOR DISCUSSION

1. Point out the many advantages of a universal religion for such a universal Empire as Rome developed, and the advantages of Emperor worship for such an Empire.
2. What do modern nations have that is much akin to Emperor worship?
3. Explain how the Hebrew scribes, administering such a mixed body of laws, naturally came to be both teachers and judges for the people.
4. Illustrate how the Hebrew tradition that the moral and spiritual unity of a people is stronger than armed force has been shown to be true in history.
5. What great lessons may we draw from the work of the Hebrews in maintaining a national unity through compulsory education?
6. Why was Jesus' idea as to the importance of the individual destined to make such slow headway in the world? What is the status of the idea to-day (*a*) in China? (*b*) in Germany? (*c*) in England? (*d*) in the United States? Is the idea necessarily opposed to nationality or even to a strong state government?
7. Show how the political Church, itself the State, was the natural outcome during the Middle Ages of the teachings of the early Christians as to the relationship of Church and State.
8. Is it to be wondered that the Romans were finally led to persecute "the vast organized defiance of law by the Christians"?
9. Show how the Christian idea of the equality and responsibility of all gave the citizen a new place in the State.
10. Explain what is meant by "a State within a State" as applied to the Church of the third and fourth centuries. Did this prove to be a good thing for the future of civilization? Why?
11. Would Rome probably have been better able to withstand the barbarian invasions if Christianity had not arisen, or not? Why?
12. Show how the Christian attitude toward pagan learning tended to stop schools and destroy the accumulated learning.
13. What was the effect of the Christian attitude toward the care of the body, on scientific and medical knowledge, and on education? Was the Christian or the pagan attitude more nearly like that of modern times?
14. Why did the emphasis on form of belief, in the third and fourth centuries, come to supersede the emphasis on personal virtues and simple faith of the first and second centuries?
15. Compare the work of the Sunday School of to-day with the catechumenal instruction of the early Christians.

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28. Saint Paul: Epistle to the Romans.
29. Saint Paul: To the Athenians.
30. The Crimes of the Christians.
    (*a*) Minucius Felix: The Roman Point of View.
    (*b*) Tertullian: The Christian Point of View.
31. Persecution of the Christians as Disloyal Subjects of the Empire.
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    (*b*) Trajan to Pliny.

32. Tertullian: Effect of the Persecutions.
33. Eusebius: Edicts of Diocletian against the Christians.
34. Workman: Certificate of having Sacrificed to the Pagan Gods.
35. Kingsley: The Empire and Christianity in Conflict.
36. Lactantius: The Edict of Toleration by Galerius.
37. Theodosian Code: The Faith of Catholic Christians.
38. Theodosian Code: Privileges and Immunities granted the Clergy.
39. Apostolic Constitutions: How the Catechumens are to be instructed.
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44. Lanfranc: Enforcing Lenten Reading in the Monasteries.
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SUPPLEMENTARY REFERENCES

* Dill, Sam'l. *Roman Society in the Last Century of the Western Empire.*
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* Fisher, Geo. P. *History of the Christian Church.*
* Hatch, Edw. *Influence of Greek Ideas and Usages upon the Christian Church.* (Hibbert Lectures, 1888.)
Hodgson, Geraldine. *Primitive Church Education.*
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MacCabe, Joseph. *Saint Augustine.*
* Monro, D. C. and Sellery, G. E. *Mediæval Civilization.*
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CHAPTER V

NEW PEOPLES IN THE EMPIRE

The weakened Empire. Though the first and second centuries A.D. have often been called one of the happiest ages in all human history, due to a succession of good Emperors and peace and quiet throughout the Roman world, the reign of the last of the good Emperors, Marcus Aurelius (161–180 A.D.), may be regarded as clearly marking a turning-point in the history of Roman society. Before his reign Rome was ascendant, prosperous, powerful; during his reign the Empire was beset by many difficulties — pestilence, floods, famine, troubles with the Christians, and heavy German inroads — to which it had not before been accustomed; and after his reign the Empire was distinctly on the defensive and the decline. Though the elements contributing to this change in national destiny had their origin in the changes in the character of the national life at least two centuries earlier, it was not until now that the Empire began to feel seriously the effects of these changes in a lowered vitality and a weakened power of resistance. Sooner or later the boundaries of the Empire, which had held against the pressure from without for so long, were destined to be broken, and the barbarian deluge from the north and east would pour over the Empire.

The boundaries of the Empire are broken. While temporary extensions of territory had at times been made beyond the Rhine and the Danube, these rivers had finally come to be the established boundaries of the Empire on the north, and behind these rivers the Teutonic barbarians, or *Germani*, as the Romans called them, had by force been kept. To do even this the Romans had been obliged to admit bands of Germans into the Empire, and had taken them into the Roman army as "allies," making use of their great love for fighting to hold other German tribes in check. In 166 A.D. the plague, brought back by soldiers returning from the East, carried off approximately half the population of Italy. This same year the Marcomanni, a former friendly tribe, invaded the Empire as far as the head of the Adriatic Sea, and it required thirteen years of warfare to put them back behind the Danube. Even this was accomplished only by the aid of friendly German tribes. From this time on the Empire was more or less on the defensive, with the barbarian tribes to the north casting increasingly longing eyes toward "a place in the sun" and the rich plunder that lay to the south, and frequently breaking over the boundaries.

Who these invaders were. A long-continued series of tribal migrations, unsurpassed before in history, soon brought a large number of new peoples within the boundaries of the old Empire. They finally came so fast that they could not have been assimilated even in the best days of Rome, and now the assimilative and digestive powers of Rome were gone. Tall, huge of limb, white-skinned, flaxen-haired, with fierce blue eyes, and clad in skins and rude cloths, they seemed like giants to the short, small, dark-skinned people of the Italian peninsula. Quarrelsome; delighting in fighting and gambling; given to drunkenness and gluttonous eating; possessed of a rude polytheistic religion in which *Woden*, the war god, held the first place, and Valhalla was a heaven for those killed in battle; living in rude villages in the forest, and maintaining themselves by hunting and fishing — it is not to be wondered that Rome dreaded the coming of these forest barbarians (**R. 46**).

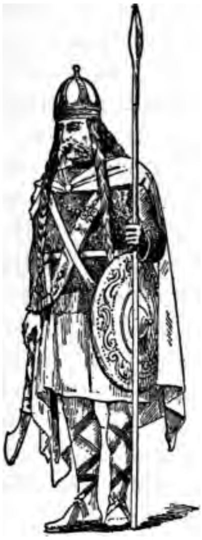

FIG. 13. A GERMAN WAR CHIEF
Restored, and rather idealized
(From the Musée d'Artillerie at Paris)

The tribes nearest the Rhine and the Danube had taken on a little civilization from long contact with the Romans, but those farther away were savage and unorganized (**Rs. 46, 47**). In general they represented a degree of civilization not particularly different from that of the better American Indians in our colonial period, though possessing a much larger ability to learn. The "two terrible centuries" which brought these new peoples into the Empire were marked by unspeakable disorder and frightful destruction. It was the most complete catastrophe that had ever befallen civilized society.

They settle down within the Empire. Finally, after a period of wandering and plundering, each of these new peoples settled down within the Empire as rulers over the numerically larger native Roman population, and slowly began to turn from hunting to a rude type of farming. For three or four centuries after the invasions ceased, though, Europe presented a dreary spectacle of ignorance, lawlessness, and violence. Force reigned where law and order had once been supreme. Work largely ceased, because there was no security for the results of labor. The Roman schools gradually died out, in part because of pagan hostility (all pagan schools were closed by imperial edict in 529 A.D.), and in part because they no longer ministered to any real need. The church and the monastery schools alone remained, the instruction in these was meager indeed, and they served almost entirely the special needs of the priestly and monastic classes. The Latin language was corrupted and modified into spoken dialects, and the written language died out except with the monks and the clergy. Even here it became greatly corrupted. Art perished, and science disappeared. The former Roman skill in handicrafts was largely lost. Roads and bridges were left without repair. Commerce and intercourse almost ceased. The cities decayed, and many were entirely destroyed (**R.** 49).

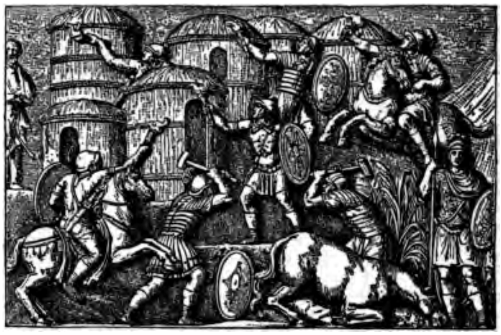

FIG. 14. ROMANS DESTROYING A GERMAN VILLAGE
(From the Column of Marcus Aurelius, at Rome)
Note the circular huts of reeds, without windows, and with but a single door.

The new ruling class was ignorant — few could read or write their names — and they cared little for the learning of Greece and Rome. Much of what was excellent in the ancient civilizations died out because these new peoples were as yet too ignorant to understand or use it, and what was preserved was due to the work of others than themselves. It was with such people and on such a basis that it was necessary for whatever constructive forces still remained to begin again the task of building up new foundations for a future European civilization. This was the work of centuries, and during the period the lamp of learning almost went out.

Barbarian and Roman in contact. Civilization was saved from almost complete destruction chiefly by reason of the long and substantial work which Rome had done in organizing and governing and unifying the Empire; by the relatively slow and gradual coming of the different tribes; and by the thorough organization of the governing side of the Christian Church, which had been effected before the Empire was finally overrun and Roman government ceased. In unifying the government of the Empire and establishing a common law, language, and traditions, and in early beginning the process of receiving barbarians into the Empire and educating them in her ways and her schools, Rome rendered the western world a service of inestimable importance and one which did much to prepare the way for the reception and assimilation of the invaders. In the cities, which remained Roman in spirit even after their rulers had changed, and where the Roman population greatly preponderated even after the invaders had come, some of the old culture and handicrafts were kept up, and in the cities of southern Europe the municipal form of city government was retained. Roman law still applied to trials of Roman citizens, and many Roman governmental forms passed over to the invader chiefly because he knew no other. The old Roman population for long continued to furnish the clergy, and these, because of their ability to read and write, also became the secretaries and advisers of their rude Teutonic overlords. In one capacity or another they persuaded the leaders of the tribes to adopt, not only Christianity, but many of the customs and practices of the old civilization as well. These various influences helped to assimilate and educate the newcomers, and to save something of the old civilization for the future. Being strong, sturdy, and full of youthful energy, and with a large capacity for learning, the civilizing process, though long and difficult, was easier than it might otherwise have been, and because of their strength and vigor these new races in time infused new life and energy into every land from Spain to eastern Europe (**R. 50**).

The impress of Christianity upon them. The importance of the services rendered by bishops, priests, and monks during what are known as the *Dark Ages* can hardly be overestimated. In the face of might they upheld the right of the Church and its representatives to command obedience and respect. The Christian priest gradually forced the barbarian chief to do his will, though at times he refused to be awed into submission, murdered the priest, and sacked the sacred edifice. That the Church lost much of its early purity of worship, and adopted many practices *fitted to the needs* of the time, but not consistent with real religion, there can be no question. In time the Church gained much from the mixture of these new peoples among the old, as they infused new vigor and energy into the blood of the old races, but the immediate effect was quite otherwise. The Church itself was paganized, but the barbarians were in time Christianized.

Priests and missionaries went among the heathen tribes and labored for their conversion. Of course the leaders were sought out first, and often the conversion of a chieftain was made by first converting his wife. After the chieftain had been won the minor leaders in time followed. The lesson of the cross was proclaimed, and the softening and restraining influences of the Christian faith were exerted on the barbarian. It was, however, a long and weary road to restore even a semblance of the order and respect for life and property which had prevailed under Roman rule.

Work of the Church during the Middle Ages. Everywhere throughout the old Empire, and far into the forest depths of barbarian lands, went bishops, priests, and missionaries, and there parishes were organized, rude churches arose, and the process of educating the fighting tribesmen in the ways of civilized life was carried out. It was not by schools of learning, but by faith and ceremonial that the Church educated and guided her children into the type she approved. Schools for other than monks and clergy for a time were not needed, and such practically died out. The Church and its offices took the place of education and exercised a wholesome and restraining influence over both young and old throughout the long period of the Middle Ages. These the Church in time taught the barbarian to respect. The great educational work of the Church during this period of insecurity and ignorance has seldom been better stated than in the following words by Draper:

> Of the great ecclesiastics, many had risen from the humblest ranks of society, and these men, true to their democratic instincts, were often found to be the inflexible supporters of right against might. Eventually coming to be the depositaries of the knowledge that then existed, they opposed intellect to brute force, in many instances successfully, and by the example of the organization of the Church, which was essentially republican, they showed how representative systems may be introduced into the State. Nor was it over communities and nations that the Church displayed her chief power. Never in the world before was there such a system. From her central seat at Rome, her all-seeing eye, like that of Providence itself, could equally take in a hemisphere at a glance, or examine the private life of any individual. Her

boundless influences enveloped kings in their palaces, and relieved the beggar at the monastery gate. In all Europe there was not a man too obscure, too insignificant, or too desolate for her. Surrounded by her solemnities, every one received his name at her altar; her bells chimed at his marriage, her knell tolled at his funeral. She extorted from him the secrets of his life at her confessionals, and punished his faults by her penances. In his hour of sickness and trouble her servants sought him out, teaching him, by her exquisite litanies and prayers, to place his reliance on God, or strengthening him for the trials of life by the example of the holy and just. Her prayers had an efficacy to give repose to the souls of his dead. When, even to his friends, his lifeless body had become an offense, in the name of God she received it into her consecrated ground, and under her shadow he rested till the great reckoning-day. From little better than a slave she raised his wife to be his equal, and, forbidding him to have more than one, met her recompense for those noble deeds in a firm friend at every fireside. Discountenancing all impure love, she put round that fireside the children of one mother, and made that mother little less than sacred in their eyes. In ages of lawlessness and rapine, among people but a step above savages, she vindicated the inviolability of her precincts against the hand of power, and made her temples a refuge and sanctuary for the despairing and oppressed. Truly she was the shadow of a great rock in many a weary land.

The civilizing work of the monasteries. No less important than the Church and its clergy was the work of the monasteries and their monks in building up a basis for a new civilization. These, too, were founded all over Europe. To make a map of western Europe showing the monasteries established by 800 A.D. would be to cover the map with a series of dots. The importance of their work is better understood when we remember that the Germans had never lived in cities, and did not settle in them on entering the Empire. The monasteries, too, were seldom established in towns. Their sites were in the river valleys and in the forests (**R. 69**), and the monks became the pioneers in clearing the land and preparing the way for agriculture and civilization. Not infrequently a swamp was taken and drained. The Middle-Age period was essentially a period of settlement of the land and of agricultural development, and the monks lived on the land and among a people just passing through the earliest stages of settled and civilized life. In a way the inheritors of the agricultural and handicraft knowledge of the Romans, the monks became the most skillful artisans and farmers to be found, and from them these arts in time reached the developing peasantry around them. Their work and services have been well summed up by the same author just quoted, as follows:

It was mainly by the monasteries that to the peasant class of Europe was pointed out the way of civilization. The devotions and charities; the austerities of the brethren; their abstemious meal; their meager clothing, the cheapest of the country in which they lived; their shaven heads, or the cowl which shut out the sight of sinful objects; the long staff in their hands; their naked feet and legs; their passing forth on their journeys by twos, each a watch on his brother; the prohibitions against eating outside of the wall of the monastery, which had its own mill, its own bakehouse, and whatever was needed in an abstemious domestic economy; their silent hospitality to the wayfarer, who was refreshed in a separate apartment; the lands around their buildings turned from a wilderness into a garden, and, above all, labor exalted and ennobled by their holy hands, and celibacy, forever, in the eye of the vulgar, a proof of separation from the world and a sacrifice to heaven — these were the things that arrested the attention of the barbarians of Europe, and led them on to civilization.

The problem faced by the Middle Ages. That the lamp of learning burned low during this period of assimilation is no cause for wonder. Recovery from such a deluge of barbarism on a weakened society is not easy. In fact the recovery was a long and slow process, occupying nearly the whole of a thousand years. The problem which faced the Church, as the sole surviving force capable of exerting any constructive influence, was that of changing the barbarism and anarchy of the sixth century, with its low standards of living and lack of humane ideals, into the intelligent, progressive civilization of the fifteenth century. This was the work of the Middle Ages, and largely the work of the Christian Church. It was not a period of progress, but one of assimilation, so that a common western civilization might in time be developed out of the diverse and hostile elements mixed together by the rude force of circumstances.

QUESTIONS FOR DISCUSSION

1. Do the peculiar problems of assimilation of the foreign-born, revealed to us by the World War, put us in a somewhat similar position to Rome under the Empire as relates to the need of a guiding national faith?
2. Outline how Rome might have been helped and strengthened by a national school system under state control.
3. Outline how our state school systems could be made much more effective as national instruments by the infusion into their instruction of a strong national faith.
4. Try to picture the results upon our civilization had western Europe become Mohammedan.
5. The movement of new peoples into the Roman Empire was much slower than has been the immigration of foreign peoples into the United States, since 1840. Why the difference in assimilative power?

6. How do you think the Roman provinces and Italy, after the tribes from the North had settled down within the Empire, compared with Mexico after the years of revolution with peons and brigands in control? With Russia, after the destruction wrought by the Bolshevists?
7. Explain the importance of the long civilizing and educating work of Rome among the German tribes, in preparing the means for the preservation of Roman institutions after the downfall of the Roman government.
8. What does the fact that Roman institutions and Roman thinking continued and profoundly modified mediæval life indicate as to the nature of Roman government and the Roman power of assimilation?
9. Though Rome never instituted a state school system, was there not after all large educational work done by the government through its intelligent administration?
10. Show how the breakdown of Roman government and Roman institutions was naturally more complete in Gaul than in northern Italy, and more complete in northern than in central or southern Italy, and hence how Roman civilization was naturally preserved in larger measure in the cities of Italy than elsewhere.
11. Show how the Christian Church, too, could not have completely dispensed with Roman letters and Roman civilization, had it desired to do so, but was forced of necessity to preserve and pass on important portions of the civilization of Rome.
12. What do you think would have been the effect on the future of civilization had the barbarian tribes overrun Spain, Italy, and Greece during the Age of Pericles?
13. What modern analogies do we have to the civilizing work of the monks and clergy during the Middle Ages?
14. Picture the work of the monasteries in handing on to western Europe the arts and handicrafts and skilled occupations of Rome. Cite some examples.
15. What civilizing problem, somewhat comparable to that of barbarian Europe, have we faced in our national history? Why have we been able to obtain results so much more rapidly?

SELECTED READINGS

In the accompanying *Book of Readings* the following selections are reproduced:

46. Cæsar: The Hunting Germans and their Fighting Ways.
47. Tacitus: The Germans and their Domestic Habits.
48. Dill: Effect on the Roman World of the News of the Sacking of Rome by Alaric.
49. Giry and Réville: Fate of the Old Roman Towns.
50. Kingsley: The Invaders, and what they brought.
51. General Form for a Grant of Immunity to a Bishop.
52. Charlemagne: Powers and Immunities granted to the Monastery of Saint Marcellus.

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CHAPTER VI

EDUCATION DURING THE EARLY MIDDLE AGES[1]

I. CONDITION AND PRESERVATION OF LEARNING

The low intellectual level. As was stated in the preceding chapter, the lamp of learning burned low throughout the most of western Europe during the period of assimilation and partial civilization of the barbarian tribes. The western portion of the Roman Empire had been overrun, and rude Germanic chieftains were establishing, by the law of might, new kingdoms on the ruins of the old. The Germanic tribes had no intellectual life of their own to contribute, and no intellectual tastes to be ministered unto. With the destruction of cities and towns and country villas, with their artistic and literary collections, much that represented the old culture was obliterated, and books became more and more scarce. The destruction was gradual, but by the beginning of the seventh century the loss had become great. The Roman schools also gradually died out as the need for an education which prepared for government and gave a knowledge of Roman law passed away, and the type of education approved by the Church was left in complete control of the field. As the security and leisure needed for study disappeared, and as the only use for learning was now in the service of the Church, education became limited to the narrow lines which offered such preparation and to the few who needed it. Amid the ruins of the ancient civilization the Church stood as the only conservative and regenerative force, and naturally what learning remained passed into its hands and under its control.

The result of all these influences and happenings was that by the beginning of the seventh century Christian Europe had reached a very low intellectual level, and during the seventh and eighth centuries conditions grew worse instead of better. Only in England and Ireland, as will be pointed out a little later, and in a few Italian cities, was there anything of consequence of the old Roman learning preserved. On the Continent there was little general learning, even among the clergy (R. 64 a). Many of the priests were woefully ignorant, and the Latin writings of the time contain many inaccuracies and corruptions which reveal the low standard of learning even among the better educated of the clerical class. The Church itself was seriously affected by the prevailing ignorance of the period, and incorporated into its system of government and worship many barbarous customs and practices of which it was a long time in ridding itself. So great had become the ignorance and superstition of the time, among priests, monks, and the people; so much had religion taken on the worship of saints and relics and shrines; and so much had the Church developed the sensuous and symbolic, that religion had in reality become a crude polytheism instead of the simple monotheistic faith of the early Church. Along scientific lines especially the loss was very great. Scientific ideas as to natural phenomena disappeared, and crude and childish ideas as to natural forces came to prevail. As if barbarian chiefs and robber bands were not enough, popular imagination peopled the world with demons, goblins, and dragons, and all sorts of superstitions and supernatural happenings were recorded. Intercommunication largely ceased; trade and commerce died out; the accumulated wealth of the past was destroyed; and the old knowledge of the known world became badly distorted, as is evidenced by the many crude mediæval maps. The only scholarship of the time, if such it might be called, was the little needed by the Church to provide for and maintain its government and worship. Almost everything that we to-day mean by civilization in that age was found within the protecting walls of monastery or church, and these institutions were at first too busy building up the foundations upon which a future culture might rest to spend much time in preserving learning, much less in advancing it.

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[1] *From the sixth* to the twelfth centuries.

The monasteries develop schools. In this age of perpetual lawlessness and disorder the one opportunity for a life of repose and scholarly contemplation lay in the monasteries. Here the rule of might and force was absent (**R. 52**), and the timid, the devout, and the studiously inclined here found a refuge from the turbulence and brutality of a rude civilization. The early monasteries, and especially the monastery of Saint Victor, at Marseilles, founded by Cassian in 404, had represented a culmination of the western feeling of antagonism to all ancient learning, but with the founding of Monte Cassino by Saint Benedict, in 529 A.D., and the promulgation of the Benedictine rule (R. 43), a more liberal attitude was shown. This rule was adopted generally by the monasteries throughout what is now Italy, Spain, France, Germany, and England, and the Benedictine became the type for the monks of the early Middle Ages. To this order we are largely indebted for the copying of books and the preservation of learning throughout the mediæval period.

FIG. 15. A TYPICAL MONASTERY OF SOUTHERN EUROPE

The 48th rule of Saint Benedict, it will be remembered (R. 43), had imposed reading and study as a part of the daily duty of every monk, but had said nothing about schools. Subsequent regulations issued by superiors had aimed at the better enforcement of this rule (R. 44), that the monks might lead devout lives and know the Bible and the sacred writings of the Church. Imposed at first as a matter of education and discipline for the monks, this rule ultimately led to the establishment of schools and the development of a system of monastic instruction. As youths were received at an early age into the monasteries to prepare for a monastic life, it was necessary that they be taught to read if they were later to use the sacred books. This led to the duty of instructing novices, which marks the beginning of monastic instruction for those within the walls. As books were scarce and at the same time necessary, and the only way to get new ones was to copy from old ones, the monasteries were soon led to take up the work once carried on by the publishing houses of ancient Rome, and in much the same way. This made writing necessary, and the novices had to be instructed carefully in this, as well as in reading. The chants and music of the Church called for instruction of the novices in music, and the celebration of Easter and the fast and festival days of the Church called for some rudimentary *instruction in* numbers and calculation.

Out of these needs rose the monastery school, the copying of manuscripts, and the preservation of books. Due to their greater security and quiet the monasteries became the leading teaching institutions of the early part of the Middle-Age period, and those who wished their children trained for the service of the Church gave them to the monasteries (**R. 53 a**). The development of the monastic schools was largely voluntary, though from an early date bishops and rulers began urging the monasteries to open schools for boys in connection with their houses, and schools became in time a regular feature of the monastic organization. From schools only for those intending to take the vows (*oblati*), the instruction was gradually opened, after the ninth century, to others (*externi*) not intending to take the vows, and what came to be known as "outer" monastic schools were in time developed.

The monasteries became the preservers of learning. Another need developed the copying of pagan books, and incidentally the preservation of some of the best of Roman literature. The language of the Church very naturally was Latin, as it was a direct descendant of Roman life, governmental organization, citizenship, and education. The writings of the Fathers of the Western Church had all been in Latin, and in the fourth century the Bible had been translated from the Greek into the Latin. This edition, known as the *Vulgate Bible*, became the standard for western Europe for ten centuries to come. The German tribes which had invaded the Empire had no written languages of their own, and their spoken dialects differed much from the Latin speech of those whom they had conquered. Latin was thus the language of all those of education, and naturally continued as the language of the Church and the monastery for both speech and writing. All books were, of course, written in Latin.

Under the rude influences and the general ignorance of the period, though, the language was easily and rapidly corrupted, and it became necessary for the monasteries and the churches to have good models of Latin prose and verse to refer to. These were best found in the old Latin literary authors — particularly Cæsar, Cicero, and Vergil. To have these, due to the great destruction of old books which had taken place during the intervening centuries, it was necessary to copy these authors, as well as the Psalter, the Missal, the sacred books, and the writings of the Fathers of the Church (**Rs. 55, 56**). It thus happened that the monasteries unintentionally began to preserve and use the

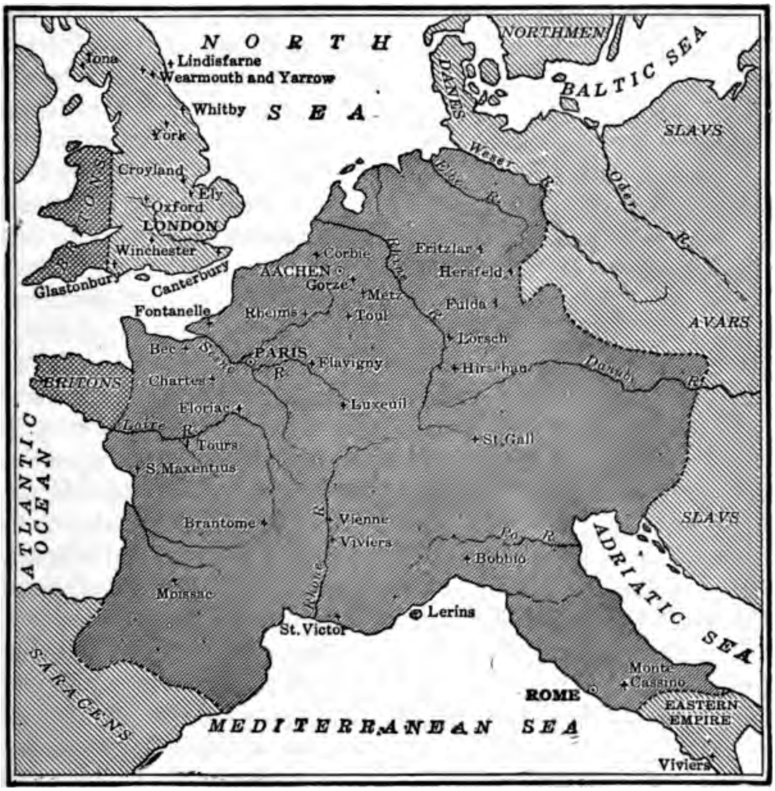

FIG. 16. CHARLEMAGNE'S EMPIRE, AND THE IMPORTANT MONASTERIES OF THE TIME

Charlemagne's empire at his death is shaded darker than other parts of the map

ancient Roman books, and from using them at first as models for style, an interest in their contents was later awakened. While many of the monasteries remained as farming, charitable, and ascetic institutions almost exclusively, and were never noted for their educational work, a small but increasing number gradually accumulated libraries and became celebrated for their literary activity and for the character of their instruction. The monasteries thus in time became the storehouses of learning, the publishing houses of the Middle Ages (**Rs.** 54, 55, 56), teaching institutions of first importance, and centers of literary activity and religious thought, as well as centers for agricultural development, work in the arts and crafts, and Christian hospitality. Many developed into large and important institutions (**R.** 69).

The convents and their schools. The early part of the Middle Ages also witnessed a remarkable development of convents for women, these receiving a special development in Germanic lands. Filled with the same aggressive spirit as the men, but softened somewhat by Christianity, many women of high station among the German tribes founded convents and developed institutions of much renown. This provided a rather superior class of women as organizers and directors, and a conventual life continued, throughout the entire Middle Ages, to attract an excellent class of women. This will be understood when it is remembered that a conventual life offered to women of intellectual ability and scholarly tastes the one opportunity for an education and a life of learning. The convents, too, were much earlier and much more extensively opened for instruction to those not intending to take the vows than was the case with the monasteries, and, in consequence, it became a common practice throughout the Middle Ages, just as it is to-day among Catholic families, to send girls to the convent for education and for training in manners and religion. Many well-trained women were produced in the convents of Europe in the period from the sixth to the thirteenth centuries.

The instruction consisted of reading, writing, and copying Latin, as in the monasteries, as well as music, weaving and spinning, and needlework. Weaving and spinning had an obvious utilitarian purpose, and needlework, in addition to necessary sewing, was especially useful in the production of altar-cloths and sacred vestments. The copying and illuminating of manuscripts, music, and embroidering made a special appeal to women (**R. 56**), and some of the most beautifully copied and illuminated manuscripts of the mediæval period are products of their skill. Their contribution to music and art, as it influenced the life of the time, was also large. The convent schools reached their highest development about the middle of the thirteenth century, after which they began to decline in importance.

The cathedral school at York. One of the schools which early attained fame was the cathedral school at York, in northern England. This had, by the middle of the eighth century, come to possess for the time a large library, and contained most of the important Latin authors and textbooks then known (R. 61). In this school, under the *scholasticus* Ælbert, was trained a youth by the name of Alcuin, born in or near York, about 735 A.D. In a poem describing the school (R. 60), he gives a good portrayal of the instruction he received, telling how the learned Ælbert "moistened thirsty hearts with diverse streams of teaching and the varied dews of learning," and sorted out "youths of conspicuous intelligence" to whom he gave special attention. Alcuin afterward succeeded Ælbert as *scholasticus*, and was widely known as a gifted teacher. Well aware of the precarious condition of learning amid such a rude and uncouth society, he handed on to his pupils the learning he had received, and imbued them with something of his own love for it and his anxiety for its preservation and advancement. It was this Alcuin who was soon to give a new impetus to the development of schools and the preservation of learning in Frankland.

Charlemagne and Alcuin. In 768 there came to the throne as king of the great Frankish nation one of the most distinguished and capable rulers of all time — a man who would have been a commanding personality in any age or land. His ancestors had developed a great kingdom, and it was his grandfather who had severely defeated the Saracens at Tours and driven them back over the Pyrenees into Spain. This man Charlemagne easily stands out as one of the greatest figures of all history. For five hundred years before and after him there is no ruler who matched him in insight, force, or executive capacity. He is particularly the dominating figure of mediæval times. Born in an age of lawlessness and disorder, he used every effort to civilize and rule as intelligently as possible the great Frankish kingdom.

Realizing better than did his bishops and abbots the need for educational facilities for the nobles and clergy, he early turned his attention to securing teachers capable of giving the needed instruction. These, though, were scarce and hard to obtain. After two unsuccessful efforts to obtain a master scholar to become, as it were, his minister of education, he finally succeeded in drawing to his court perhaps the greatest scholar and teacher in all England. At Parma, in northern Italy, Charlemagne met Alcuin, in 781, and invited him to leave York for Frankland. After obtaining the consent of his archbishop and king, Alcuin accepted, and arrived, with three assistants, at Charlemagne's court, in 782, to take up the work of educational propaganda in Frankland.

The plight in which he found learning was most deplorable, presenting a marked contrast to conditions in England. Learning had been almost obliterated during the two centuries of wild disorder from 600 on. From 600 to 850 has often been called the darkest period of the Dark Ages, and Alcuin arrived when Frankland was at its worst. The monastic and cathedral schools which had been established earlier had in large part been broken up, and the monasteries had become places for the pensioning of royal favorites and hence had lost their earlier religious zeal and effectiveness. The abbots and bishops possessed but little learning, and the lower clergy, recruited largely from bondmen, were grossly ignorant, greatly to the injury of the Church. The copying of books had almost ceased, and learning was slowly dying out.

The palace school. There had for some time been a form of school connected with the royal court, known as the *palace school,* though the study of letters had played but a small part in it. To the reorganization of this school Alcuin first addressed himself, introducing into it elementary instruction in that learning of which he was so fond. The school included the princes and princesses of the royal household, relatives, attachés, courtiers, and, not least in importance as pupils, the king and queen. To meet the needs of such a heterogeneous circle was no easy task.

The instruction which Alcuin provided for the younger members of the circle was largely of the question and answer (catechetical) type, both questions and answers being prepared by Alcuin beforehand and learned by the pupils. Fortunately examples of Alcuin's instruction have been preserved to us in a dialogue prepared for the instruction of Pepin, a son of Charlemagne, then sixteen years old (**R. 62**). With the older members the questions and answers were oral. For all, though, the instruction was of a most elementary nature, ranging over the elements of the subjects of instruction of the time. Poetry, arithmetic, astronomy, the writings of the Fathers, and theology are mentioned as having been studied. Charlemagne learned to read Latin, but is said never to have mastered the art of writing.

Charlemagne's proclamations on education. After reorganizing the palace school, Alcuin and Charlemagne turned their attention to the improvement of education among the monks and clergy throughout the realm. The first important service was the preparation and sending out of a carefully collected and edited series of sermons to the churches containing, "in two volumes, lessons suitable for the whole year and for each separate festival, and free from error." These Charlemagne ordered used *in the churches* (**R. 63**). He also says, "we have striven with watchful zeal to advance the cause of learning, which has been almost forgotten by the negligence of our ancestors; and, by our example, also we invite those whom we can to master the study of the liberal arts," meaning thereby to incite the bishops and clergy to a study of the learning of the mediæval time. The volumes and letter were sent out in 786, four years after Alcuin's arrival at the court. Further to aid in the revival of learning, Charlemagne, in 787, imported a number of monks from Italy, who were capable of giving instruction in arithmetic, singing, and grammar, and sent them to the principal monasteries to teach.

In 787 the first general proclamation on education of the Middle Ages was issued (**R. 64 a**), and from it we can infer much as to the state of learning among the monks and clergy of the time. In this document the king gently reproves the abbots of his realm for their illiteracy, and exhorts them to the study of letters. The signature is Charlemagne's, but the hand is Alcuin's. In it he tells the abbots, in commenting on the fact that they had sent letters to him telling him that "sacred and pious prayers" were being offered in his behalf, that he recognized in "most of these letters both correct thoughts and uncouth expressions; because what pious devotion dictated faithfully to the mind, the tongue, uneducated on account of the neglect of study, was not able to express in a letter without error." He therefore commands the abbots neither to neglect the study of letters, if they wish to have his favor, nor to fail to send copies of his letter "to all your suffragans and fellow bishops, and to all the monasteries." Two years later (789) Charlemagne supplemented this by a further general admonition (**R. 64 b**) to the ministers and clergy of his realm, exhorting them to live clean and just lives, and closing with:

> And let schools be established in which boys may learn to read. Correct carefully the Psalms, the signs in writing, the songs, the calendar, the grammar, in each monastery and bishopric, and the catholic book; because often some desire to pray to God properly, but they pray badly because of incorrect books.

Effect of the work of Charlemagne and Alcuin. The actual results of the work of Charlemagne and Alcuin were, after all, rather meager. The difficulties they faced are almost beyond our comprehension. Nobles and clergy were alike ignorant and uncouth. There seemed no place to begin. It may be said that by Charlemagne's work he greatly widened the area of civilization, created a new Frankish-Roman Empire to be the inheritor of the civilization and culture of the old one, checked the decline in learning and reawakened a desire for study, and that he began the substitution of ideas for might as a ruling force among the tribes under his rule. That for a time he gave an important impetus to the study of letters, which resulted in a real revival in the educational work of some of the monasteries and cathedral schools, seems certain. Men knew more of books and wrote better Latin than before, and those who wished to learn found it easier to do so. The state of society and the condition of the times, however, were against any large success for such an ambitious educational undertaking, and after the death of Charlemagne, the division of his empire, and the invasions of the Northmen, education slowly declined again, though never to quite the level it had reached when Charlemagne came to the throne. In a few schools there was no decline, and these became the centers of learning of the future.

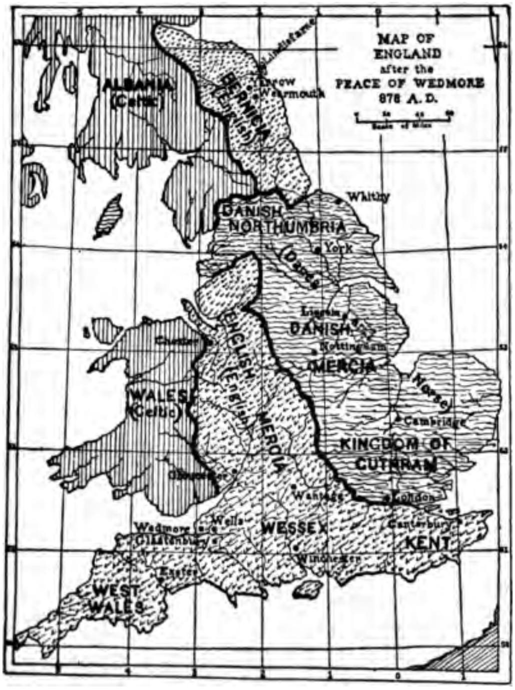

Fig. 17. Where the Danes ravaged England

New invasions; the Northmen. Five years after Alcuin went to Frankland to help Charlemagne revive learning in his kingdom, a fresh series of barbarian invasions began with the raiding of the English coast by the Danes. In raid after raid, extending over nearly a hundred years, these Danes gradually overran all of eastern and central England from London north to beyond Whitby, plundering and burning the churches and monasteries, and destroying books and learning everywhere. By the Peace of Wedmore, effected by King Alfred in 878, the Danes were finally given about one half of England, and in return agreed to settle down and accept Christianity.

Work of Alfred in England. The set-back to learning caused by this latest deluge of barbarism was a serious one, and one from which the land did not recover for a long time. In northern Frankland and in England the results were disastrous. The revival which Charlemagne had started was checked, and England did not recover from the blow for centuries. Even in the parts of England not invaded and pillaged, education sadly declined as a result of nearly a century of struggle against the invaders (**R.** 66). Alfred, known to history as *Alfred the Great,* who ruled as English king from 871 to 901, made great efforts to revive learning in his kingdom. Probably inspired by the example of Charlemagne, he established a large palace school (**R.** 68), to the support of which he devoted one eighth of his income; he imported scholars from Mercia and Frankland (**R.** 67); restored many monasteries; and tried hard to revive schools and encourage learning throughout his realm, and with some success. With the great decay of the Latin learning he tried to encourage the use of the native Anglo-Saxon language, and to this end translated books from Latin into Anglo-Saxon for his people.

In the preceding chapter and in this one we have traced briefly the great invasions, or migrations, which took place in western Europe, and indicated somewhat the great destruction they wrought within the bounds of the old Empire. In this chapter we have traced the beginnings of Christian schools to replace the ones destroyed, the preservation of learning in the monasteries, and the efforts of Charlemagne and Alfred to revive learning in their kingdoms. In the chapter which follows we shall describe the mediæval system of education as it had evolved by the twelfth century, after which we shall be ready to pass to the beginnings of that Revival of Learning which ultimately resulted in the rediscovery of the learning of the ancient world.

QUESTIONS FOR DISCUSSION

1. Picture the gradual dying-out of Roman learning in the Western Empire, and explain why pagan schools and learning lingered longer in Britain, Ireland, and Italy than elsewhere.
2. At what time was the old Roman civilization and learning most nearly extinct?
3. Explain how the monasteries were forced to develop schools to maintain any intellectual life.

4. Explain how the copying of manuscripts led to further educational development in the monasteries.
5. Would the convents have tended to attract a higher quality of women than the monasteries did of men? Why?
6. Explain why Greek was known longer in Ireland and Britain than elsewhere in the West.
7. What light is thrown on the conditions of the civilization of the time by the small permanent success of the efforts of Charlemagne, looking toward a revival of learning in Frankland?
8. Explain how Latin came naturally to be the language of the Church, and of scholarship in western Europe throughout all the Middle Ages.

SELECTED READINGS

In the accompanying *Book of Readings* the following are reproduced:

53. Migne: Forms used in connection with monastery life:
    (*a*) Form for offering a Child to a Monastery.
    (*b*) The Monastic Vow.
    (*c*) Letter of Honorable Dismissal from a Monastery.
54. Abbot Heriman: The Copying of Books at a Monastery.
55. Othlonus: Work of a Monk in writing and copying Books.
56. A Monk: Work of a Nun in copying Books.
57. Symonds: Scarcity and Cost of Books.
58. Clark· Anathemas to protect Books from Theft.
59. Bede: On Education in Early England.
    (*a*) The Learning of Theodore.
    (*b*) Theodore's Work for the English Churches.
    (*c*) How Albinus succeeded Abbot Hadrian.
60. Alcuin: Description of the School at York.
61. Alcuin: Catalogue of the Cathedral Library at York.
62. Alcuin: Specimens of the Palace School Instruction.
63. Charlemagne: Letter sending out a Collection of Sermons.
64. Charlemagne: General Proclamations as to Education.
    (*a*) The Proclamation of 787 A.D.
    (*b*) General Admonition of 789 A.D.
    (*c*) Order as to Learning of 802 A.D.
65. Alcuin: Letter to Charlemagne as to Books and Learning.
66. King Alfred: State of Learning in England in his Time.
67. Asser: Alfred obtains Scholars from Abroad.
68. Asser: Education of the Son of King Alfred.
69. Ninth-Century Plan of the Monastery at Saint Gall.

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CHAPTER VII

EDUCATION DURING THE EARLY MIDDLE AGES

II. SCHOOLS ESTABLISHED AND INSTRUCTION PROVIDED

1. *Elementary instruction and schools*

Monastic and conventual schools. In the preceding chapters we found that, by the tenth century, the monasteries had developed both inner monastic schools for those intending to take the vows (*oblati*), and outer monastic schools for those not so intending (*externi*). The distinction in name was due to the fact that the *oblati* were from the first considered as belonging to the brotherhood, participating in the religious services and helping the monks at their work. The others were not so admitted, and in all monasteries of any size a separate building, outside the main portion of the monastery was provided for the outer school. A similar classification of instruction had been evolved for the convents.

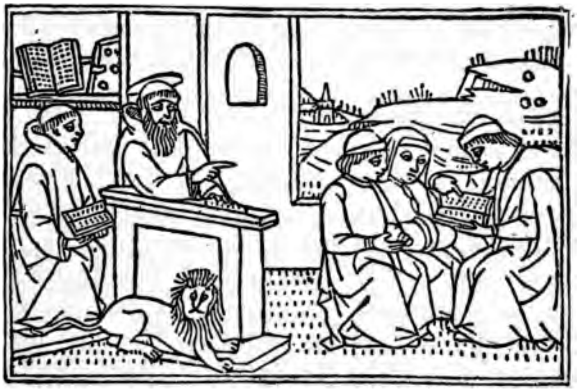

FIG. 18. AN OUTER MONASTIC SCHOOL
(After an old wood engraving)

The instruction in the inner school was meager, and in the outer school probably even more so. Reading, writing, music, simple reckoning, religious observances, and rules of conduct constituted the range of instruction. Reading was taught by the alphabet method, as among the Romans, and writing by the use of wax tablets and the stylus. Much attention was given to Latin pronunciation, as had been the practice at Rome. As Latin by this time had practically ceased to be a living tongue, outside the Church and perhaps in Central Italy, the difficulties of instruction were largely increased. The Psalter, or book of Latin psalms, was the first reading book, and this was memorized rather than read. Copy-books, usually wax, with copies expressing some scriptural injunction, were used. Music, being of so much importance in the church services, received much time and attention. In arithmetic, counting and finger reckoning, after the Roman plan, were taught. Latin was used in conversation as much as possible, some of the old lesson books much resembling conversation books of to-day in the modern languages (**R.** 75). Special attention seems to have been given to teaching rules of conduct to the *oblati*, and much corporal punishment was used to facilitate learning. Up to the eleventh century this instruction, meager as it was, constituted the whole of the preparatory training necessary for the study of theology and a career in the Church. In the convents similar schools were developed, though, as stated in the last chapter, much more attention was given to the education of those not intending to take the vows.

Song and parish schools. In the cathedral churches, and other larger non-cathedral churches, the musical part of the service was very important, and to secure boys for the choir and for other church services these churches organized what came to be known as *song schools* (**R.** 70). In these a number of promising boys were trained in the same studies and in much the same way as were boys in the monastery schools, except that much more attention was given to the musical instruction. The students in these schools were placed under the *precentor* (choir director) of the cathedral, or other large church, the *scholasticus* confining his attention to the higher or more literary instruction provided. The boys usually were given board, lodging, and instruction in return for their services as choristers. As the parish churches in the diocese also came to need boys for their services, parish schools of a similar nature were in time organized in connection with them. It was out of this need, and by a very slow and gradual evolution, that the parish school in western Europe was developed later on.

Chantry schools. Still another type of elementary school, which did not arise until near the latter part of the period under consideration in this chapter, but which will be enumerated here as descriptive of a type which later became very common, came through wills, and the schools came to be known as *chantry schools*, or *stipendary schools*. Men, in dying, who felt themselves particularly in need of assistance for their misdeeds on earth, would leave a sum of money to a church to endow a priest, or sometimes two, who were to chant masses each day for the repose of their souls. Sometimes the property was left to endow a priest to say mass in honor of some special saint, and frequently of the Virgin Mary. As such priests usually felt the need for some other occupation, some of them began voluntarily to teach the elements of religion and learning to selected boys, and in time it became common for those leaving money for the prayers to stipulate in the will that the priest should also teach a school. Usually a very elementary type of school was provided, where the children were taught to know the Lord's Prayer, the Creed, the Salutation to the Virgin, certain psalms, to sign themselves rightly with the sign of the cross, and perhaps to read and write (Latin). Sometimes, on the contrary, and especially was this the case later on in England, a grammar school was ordered maintained. After the twelfth century this type of foundation (R. 73) became quite common.

2. *Advanced instruction*

Cathedral and higher monastic schools. As the song schools developed the cathedral schools were of course freed from the necessity of teaching reading and writing, and could then develop more advanced instruction. This they did, as did many of the monasteries, and to these advanced schools those who felt the need for more training went. As grammar was, throughout all the early part of the Middle Ages, the first and most important subject of instruction, the advanced schools came to be known as *grammar schools*, as well as cathedral or episcopal schools (R. 72). The cathedral churches and monasteries of England and France early became celebrated for the high character of their instruction (R. 71) and the type of scholars they produced. All these schools, though, suffered a serious set-back during the period of the Danish and Norman invasions, many being totally destroyed.

These two types of advanced schools — the cathedral or episcopal and the monastic — formed what might be called the secondary-school system of the early Middle Ages (**Rs. 70, 71**). They were for at least six hundred years the only advanced teaching institutions in western Europe, and out of one or the other of these two types of advanced schools came practically all those who attained to leadership in the service of the Church in either of its two great branches. Still more, out of the impetus given to advanced study by the more important of these schools, the universities of a later period developed; and numerous private gifts of lands and money were made to establish grammar schools to supplement the work done by the cathedral and other large church schools.

The Seven Liberal Arts. The advanced studies which were offered in the more important monastery and cathedral schools comprised what came to be known as *The Seven Liberal Arts* of the Middle Ages. The knowledge contained in these studies, taught as the advanced instruction of the period, represents the amount of secular learning which was intentionally preserved by the Church from neglect and destruction during the period of the barbarian deluges and the reconstruction of society.

These Seven Liberal Arts were comprised of two divisions, known as:

I. THE TRIVIUM: (1) Grammar; (2) Rhetoric; (3) Dialectic (Logic).
II. THE QUADRIVIUM: (4) Arithmetic; (5) Geometry; (6) Astronomy; (7) Music.

Beyond these came Ethics or Metaphysics, and the greatest of all studies, Theology. This last represented the one professional study of the whole middle-age period, and was the goal toward which all the preceding studies had tended.

Not all these studies were taught in every monastery or cathedral school. Many of the lesser monasteries and schools offered instruction chiefly in grammar, and only a little of the studies beyond. Others emphasized the Trivium, and taught perhaps only a little of the second group. Only a few taught the full range of mediæval learning, and these were regarded as the great schools of the times (**R. 71**).

Rhabanus Maurus (776–865), one of the greatest minds of the Middle Ages, Abbot for years at Fulda, and a mediæval textbook writer of importance, has left us a good description of each of the Seven Liberal Arts studies as they were developed in his day, and their use in the Christian scheme of education (**R. 74**).

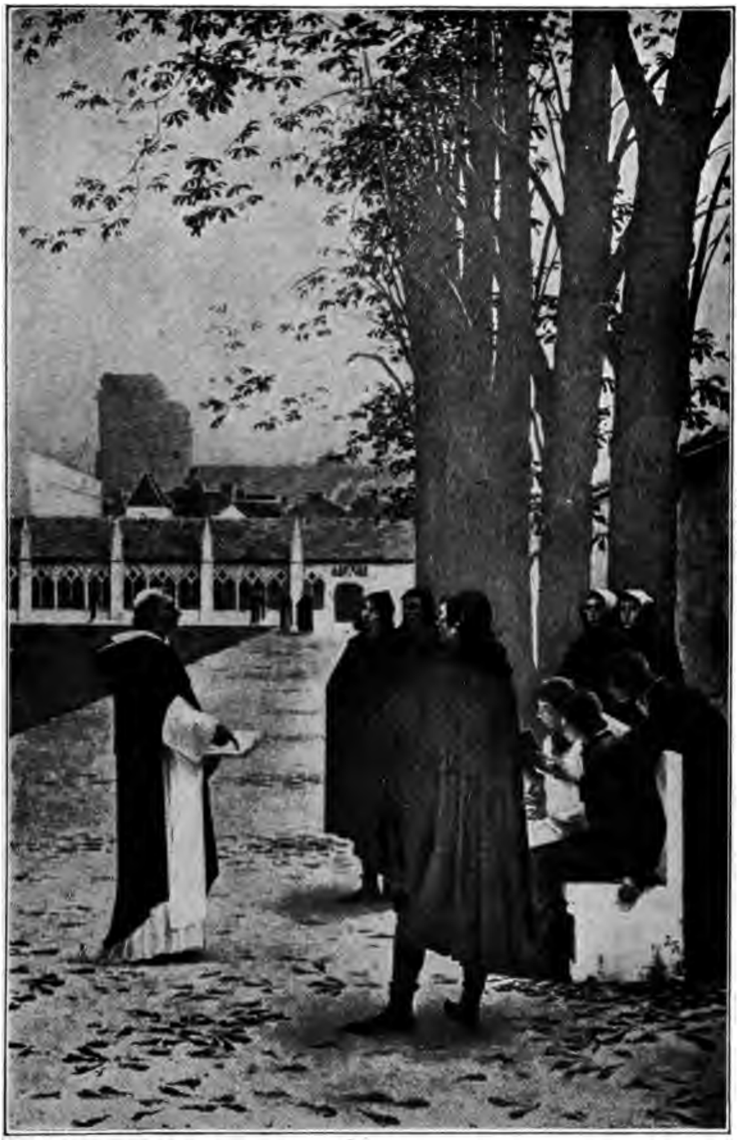

PLATE I. SAINT THOMAS AQUINAS IN THE SCHOOL OF ALBERTUS MAGNUS

(After the painting by H. Lerolle)

3. Training of the nobility

Tenth-century conditions. Following the death of Charlemagne and the break-up of the empire held together by him, a period of organized anarchy followed in western Europe. Authority broke down more completely than before, and Europe, for protection, was forced to organize itself into a great number of small defensive groups. Serfs, freemen lacking land, and small landowners alike came to depend on some nobleman for protection, and this nobleman in turn upon some lord or overlord. For this protection military service was rendered in return. The lord lived in his castle, and the peasantry worked his land and supported him, fighting his battles if the need arose. This condition of society was known as *feudalism*, and the feudal relations of lord and vassal came to be the prevailing governmental organization of the period. Feudalism was at best an organized anarchy, suited to rude and barbarous times, but so well was it adapted to existing conditions that it became the prevailing form of government, and continued as such until a better order of society could be evolved. With the invention of gunpowder, the rise of cities and industries, the evolution of modern States by the consolidation of numbers of these feudal governments, and the establishment of order and civilization, feudalism passed out with the passing of the conditions which gave rise to it. From the end of the ninth to the middle of the thirteenth centuries it was the dominant form of government.

The life of the nobility under the feudal régime gave a certain picturesqueness to what was otherwise an age of lawlessness and disorder. The chief occupation of a noble was fighting, either in his own quarrel or that of his overlord. It is hard for us to-day to realize how much fighting went on then. Much was said about "honor," but quarrels were easily started, and oaths were poorly kept. It was a day of personal feuds and private warfare, and every noble thought it his right to wage war on his neighbor at any time, without asking the consent of any one. As a preparation for actual warfare a series of mimic encounters, known as *tournaments*, were held, in which it often happened that knights were killed. In these encounters mounted knights charged one another with spear and lance, performing feats similar to those of actual warfare. This was the great amusement of the period, compared with which the German duel, the Mexican bullfight, or the American game of football are mild sports. The other diversions of the knights and nobles were hunting, hawking, feasting, drinking, making love, minstrelsy, and chess. Intellectual ability formed no part of their accomplishments, and a knowledge of reading and writing was commonly regarded as effeminate.

To take this carousing, fighting, pillaging, ravaging, destructive, and murderous instinct, so strong by nature among the Germanic tribes, and refine it and in time use it to some better purpose, and in so doing to increasingly civilize these Germanic lords and overlords, was the problem which faced the Church and all interested in establishing an orderly society in Europe. As a means of checking this outlawry the Church established and tried to enforce the "Truce of God" (**R. 79**), and as a partial means of educating the nobility to some better conception of a purpose in life the Church aided in the development of the education of chivalry, the first secular form of education in western Europe since the days of Rome, and added its sanction to it after it arose.

The education of chivalry. This form of education was an evolution. It began during the latter part of the ninth century and the early part of the tenth, reached its maximum greatness during the period of the Crusades (twelfth century), and passed out of existence by the sixteenth. The period of the Crusades was the heroic age of chivalry. The system of education which gradually developed for the children of the nobility may be briefly described as follows:

1. *Page.* Up to the age of seven or eight the youth was trained at home, by his mother. He played to develop strength, was taught the meaning of obedience, trained in politeness and courtesy, and his religious education was begun. After this, usually at seven, he was sent to the court of some other noble, usually his father's superior in the feudal scale, though in case of kings and feudal lords of large importance the children remained at home and were trained in the palace school. From seven to fourteen the boy was known as a *page*. He was in particular attached to some lady, who supervised his education in religion, music, courtesy, gallantry, the etiquette of love and honor, and taught him to play chess and other games. He was usually taught to read and write the vernacular language, and was sometimes given a little instruction in reading Latin. To the lord he rendered much

personal service such as messenger, servant at meals, and attention to guests. By the men he was trained in running, boxing, wrestling, riding, swimming, and the use of light weapons.

2. *Squire.* At fourteen or fifteen he became a squire. While continuing to serve his lady, with whom he was still in company, and continuing to render personal service in the castle, the squire became in particular the personal servant and bodyguard of the lord or knight. He was in a sense a *valet* for him, making his bed, caring for his clothes, helping him to dress, and looking after him at night and when sick. He also groomed his horse, looked after his weapons, and attended and protected him on the field of combat or in battle. He himself learned to hunt, to handle shield and spear, to ride in armor, to meet his opponent, and to fight with sword and battle-axe. As he approached the age of twenty-one, he chose his lady-love, who was older than he and who might be married, to whom he swore ever to be devoted, even though he married some one else. He also learned to rhyme, to make songs, sing, dance, play the harp, and observe the ceremonials of the Church. Girls were given this instruction along with the boys, but naturally their training placed its emphasis upon household duties, service, good manners, conversational ability, music, and religion.

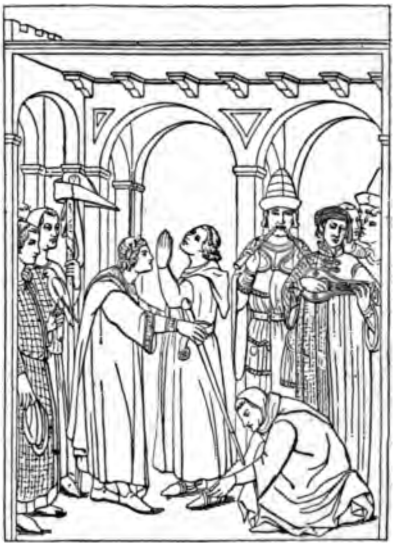

FIG. 19. A SQUIRE BEING KNIGHTED
(From an old manuscript)

3. *Knight.* At twenty-one the boy was knighted, and of this the Church made an impressive ceremonial. After fasting, confession, a night of vigil in armor spent at the altar in holy meditation, and communion in the morning, the ceremony of dubbing the squire a knight took place in the presence of the court. He gave his sword to the priest, who blest it upon the altar. He then took the oath "to defend the Church, to attack the wicked, to respect the priesthood, to protect women and the poor, to pre-

serve the country in tranquillity, and to shed his blood, even to its last drop, in behalf of his brethren." The priest then returned him the sword which he had blessed, charging him "to protect the widows and orphans, to restore and preserve the desolate, to revenge the wronged, and to confirm the virtuous." He then knelt before his lord, who, drawing his own sword and holding it over him, said: "In the name of God, of our Lady, of thy patron Saint, and of Saint Michael and Saint George, I dub thee knight; be brave (touching him with the sword on one shoulder), be bold (on the other shoulder), and loyal (on the head)."

The chivalric ideals. Such, briefly stated, was the education of chivalry. The cathedral and monastery schools not meeting the needs of the nobility, the castle school was evolved. There was little that was intellectual about the training given — few books, and no training in Latin. Instead, the native language was emphasized, and squires in England frequently learned to speak French. It was essentially an education for secular ends, and prepared not only for active participation in the feuds and warfare of the time, but also for the Seven Perfections of the Middle Ages: (1) Riding, (2) Swimming, (3) Archery, (4) Fencing, (5) Hunting, (6) Whist or Chess, and (7) Rhyming. It also represents the first type of schooling in the Middle Ages designed to prepare for life here, rather than hereafter. For the nobility it was a discipline, just as the Seven Liberal Arts was a discipline for the monks and clergy. Out of it later on was evolved the education of a gentleman as distinct from that of a scholar.

FIG. 20.
A KNIGHT OF THE TIME OF THE FIRST CRUSADE
(From a manuscript in the British Museum)

That such training had a civilizing effect on the nobility of the time cannot be doubted. Through it the Church exercised a restraining and civilizing influence on a rude, quarrelsome, and impetuous people, who resented restraints and who had no use for intellectual discipline. It developed the ability to work together for common ends, personal loyalty, and a sense of honor in an age when these were much-needed traits, and the ideal of a life of regulated service in place of one of lawless gratification was set up. What monasticism had done for the religious life in dignifying labor and service, chivalry did for secular life. The Ten Commandments of chivalry, (1) to pray, (2) to avoid sin, (3) to defend the Church, (4) to protect widows and orphans, (5) to travel, (6) to wage loyal war, (7) to fight for his Lady, (8) to defend the right, (9) to love his God, and (10) to listen to good and true men, while not often followed, were valuable precepts to uphold in that age and time. In the great Crusades movement of the twelfth century the Church consecrated the military prowess and restless energy of the nobility to her service, but after this wave had passed chivalry became formal and stilted and rapidly declined in importance (**R. 80**).

4. *Characteristics of mediæval education*

Foundations laid for a new order. The education which we have just described covers the period from the time of the downfall of Rome to the twelfth or the thirteenth century. It represents what the Church evolved to replace that which it and the barbarians had destroyed. Meager as it still was, after seven or eight centuries of effort, it nevertheless presents certain clearly marked lines of development. The beginnings of a new Christian civilization among the tribes which had invaded and overrun the old Roman Empire are evident, and, toward the latter part of the Middle Ages, we note the development of a number of centers of learning (**R. 71**) and the beginnings of that specialization of knowledge (church doctrine, classical learning, music, logic and ethics, theology), at different church and monastery schools, which promised much for the future of learning. We also notice, and will see the same evidence in the following chapter, the beginnings of a class of scholarly men, though the scholarship is very limited in scope and along lines thoroughly approved by the Church.

In education proper, in the sense that we understand it, the schools provided were still for a very limited class, and secondary rather than elementary in nature. They were intended to meet the needs of an institution rather than of a people, and to prepare those who studied in them for service to that institution. That institution, too, had concentrated its efforts on preparing its members for life in another world, and not for life or service in this. There were as yet no independent schools or scholars, the monks and clergy represented the one learned class, Theology was the one professional study, the ability to read and write was not regarded by noble or commoner as of any particular importance, and all book knowledge was in a language which the people did not understand when they heard it and could not read. Society was as yet composed of three classes — feudal warriors, who spent their time in amusements or fighting, and who had evolved a form of knightly training for their children; privileged priests and monks and nuns, who controlled all book learning and opportunities for professional advancement; and the great mass of working peasants, engaged chiefly in agriculture, and belonging to their protecting lord.

For these peasants there was as yet no education aside from what the Church gave through her watchful oversight and her religious services (**R. 81**), and but little leisure, freedom, wealth, security, or economic need to make such education possible or desirable. Moreover, the other-worldly attitude of the Church made such education seem unnecessary. It was still the education of a few for institutional purposes, though here and there, by the close of the twelfth century, the Church was beginning to urge its members to provide some education for their children (**R. 82**), and the world was at last getting ready for the evolution of the independent scholar, and soon would be ready for the evolution of schools to meet secular needs.

Repressive attitude of the mediæval Church. The great work of the Church during this period, as we see it to-day, was to assimilate and sufficiently civilize the barbarians to make possible a new civilization, based on knowledge and reason rather than force. To this end the Church had interposed her authority against barbarian force, and had slowly won the contest. Almost of necessity the Church had been compelled to insist upon her way, and this type of absolutism in church government had been extended to most other matters. The Bible, or rather the interpretations of it which church councils, popes, bishops, and theological writers had made, became authoritative, and disobedience or doubt became sinful in the eyes of the Church. The Scriptures were made the authority for everything, and interpretations the most fantastic were made of scriptural verses. Unquestioning belief was extended to many other matters, with the result that tales the most wonderful were recounted and believed. To question, to doubt, to disbelieve — these were among the deadly sins of the early Middle Ages. This attitude of mind undoubtedly had its value in assimilating and civilizing the barbarians, and probably was a necessity at the time, but it was bad for the future of the Church as an institution, and utterly opposed to scientific inquiry and intellectual progress.

This authoritative and repressive attitude of the Church expressed itself in many ways. The teaching of the period is an excellent example of this influence. The instruction in the so-called Seven Liberal Arts remained unchanged throughout a period of half a dozen centuries — so much accumulated knowledge passed on as a legacy to succeeding generations. It represented mere instruction; not education. Not until the world could shake off this mediæval attitude toward scientific inquiry and make possible honest doubt was any real intellectual progress possible.

The first teacher's certificates and school supervision. Toward the latter part of the period under consideration in this chapter an interesting development in church school administration took place. As the cathedral and song schools increased assistant teachers were needed, and the *scholasticus* and *precentor* gradually withdrew from instruction and became the supervisors of instruction, or rather the principals of their respective schools. As song or parish schools were established in the parishes of the diocese teachers for these were needed, and the *scholasticus* and *precentor* extended their authority and supervision over these, just as the Bishop had done much earlier (p. 53) over the training and appointment of priests. By 1150 we have, clearly evolved, the system of central supervision of the training of all teachers in the diocese through the issuing, for the first time in Europe, of licenses to teach (**R. 83**). The system was finally put into legal form by a decree adopted by a general council of the Church at Rome, in 1179, which required that the *scholasticus* "should have authority to superintend all the schoolmasters of the diocese and grant them licenses without which none should presume to teach," and that "nothing be exacted for licenses to teach" issued by him, thus stopping the charging of fees for their issuance. The *precentor*, in a similar manner, claimed and often secured supervision of all elementary, and especially all song-school instruction. Teachers were also required to take an oath of fealty and obedience (**R. 84 b**).

As a result of centuries of evolution we thus find, by 1200, a limited but powerful church school system, with centralized control and supervision *of instruction*, diocesan licenses to teach, and *a curriculum adapted to* the needs of the institution in control of the schools. We also note the beginnings of secular instruction in the training of the nobility for life's service, though even this is approved and sanctioned by the Church. The centralized religious control thus established continued until the nineteenth century, and still exists to a more or less important degree in the school systems of Italy, the old Austro-Hungarian States, Germany, England, and some other western nations. As we shall see later on, one of the big battles in the process of developing state school systems has come through the attempt of the State to substitute its own organization for this religious monopoly of instruction.

QUESTIONS FOR DISCUSSION

1. Outline the instruction in an inner monastery school.
2. Show how the mediæval parish school naturally developed as an offshoot of the cathedral schools, and was supplemented later by the endowed chantry schools.
3. What effect did the development of song-school instruction have on the instruction in the cathedral schools?
4. Why was it difficult to develop good cathedral schools during the early Middle Ages?
5. What does the fact that the few great textbooks were in use for so many centuries indicate as to the character of educational progress during the Middle Ages?
6. Was the Church wise in adopting and sanctifying the education of chivalry? Why?
7. What important contributions to world progress came out of chivalric education?
8. What ideals and practices from chivalry have been retained and are still in use to-day? Does the Boy Scouts movement embody any of the chivalric ideas and training?
9. Compare the education of the body by the Greeks and under chivalry.
10. Compare the Athenian ephebic oath with the vows of chivalry.
11. Picture the present world transferred back to a time when theology was the one profession.
12. What educational theory, conscious or unconscious, formed the basis for mediæval education and instruction?
13. Explain why the Church, after six or seven centuries of effort, still provided schools only for preparation for its own service.
14. What does the lack of independent scholars during the Middle Ages indicate as to possible leisure?
15. Contrast the purposes of mediæval education and the education of to-day.
16. When Greece and Rome offered no precedents, how did the Church come to so fully develop and control the education which was provided?
17. Compare the supervisory work of a modern county superintendent with that of a *scholasticus* of a mediæval cathedral.

SELECTED READINGS

In the accompanying *Book of Readings* the following selections are reproduced:

70. Leach: Song and Grammar Schools in England.
71. Mullinger: The Episcopal and Monastic Schools.
72. Statutes: The School at Salisbury Cathedral.
73. Aldwincle: Foundation Grant for a Chantry School.
74. Maurus: The Seven Liberal Arts.
75. Leach: A Mediæval Latin Colloquy.
76. Quintilian: On the Importance of the Study of Grammar.
77. Anglicus: The Elements, and the Planets.
    (*a*) Of the Elements.
    (*b*) Of Double Moving of the Planets.
78. Cott: A Tenth Century Schoolmaster's Books.
79. Archbishop of Cologne: The Truce of God.
80. Gautier: How the Church used Chivalry.
81. Draper: Educational Influences of the Church Services.
82. Winchester Diocesan Council: How the Church urged that the Elements of Religious Education be given.
83. Lincoln Cathedral: Licenses required to teach Song.
84. English Forms: Appointment and Oath of a Grammar-School Master.
    (*a*) Northallerton: Appointment of a master of Song and Grammar.
    (*b*) Archdeacon of Ely: Oath of a Grammar-School Master to.

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CHAPTER VIII

INFLUENCES TENDING TOWARD A REVIVAL OF LEARNING

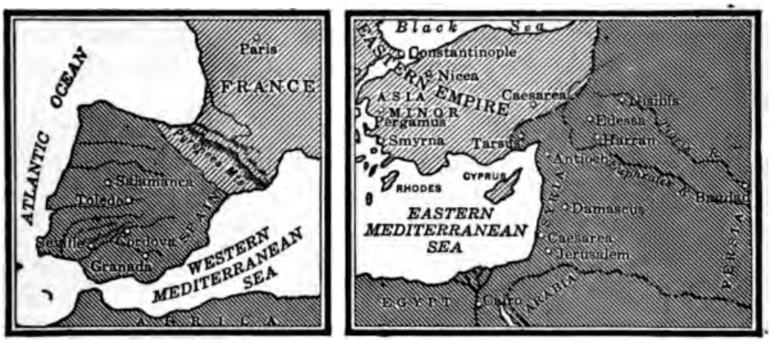
I. MOSLEM LEARNING FROM SPAIN

Great absorptive power for learning. The original Arabians themselves were not a well-educated people. Before the time of Mohammed we have practically no records as to any education among them. When in their religious conquests they overran Syria, they came in contact with the survivals of that wonderful Greek civilization and learning, and this they absorbed with greatest avidity.

Mohammedanism now came in contact with an educated people, as it did also in Babylonia (637), in Assyria (640), and in Egypt (642), and the need of a better statement of the somewhat crude faith now became evident. The same process now took place as had occurred earlier with Christianity. The Nestorian Christians and the Syrian monks became the scholars for the Mohammedans, and the Mohammedan faith was clothed in Greek forms and received a thorough tincturing of Greek philosophic thought. Within a century they had translated from Syriac into Arabic, or from the original Greek, much of the old Greek learning in philosophy, science, and medicine, and the cities of Syria, and in particular their capital, Damascus, became renowned for their learning. In 760 Bagdad, on the Tigris, was founded, and superseded Damascus as the capital. Extending eastward, these people were soon busy absorbing Hindu mathematical knowledge, obtaining from them (c. 800) the so-called Arabic notation and algebra.

They develop schools and advance learning. In 786 Haroun-al-Raschid became Caliph at Bagdad, and he and his son made it an intellectual center of first importance. In all the known world probably no city, not even Constantinople, during the latter part of the eighth century and most of the ninth, could vie with Bagdad as a center of learning. Basra, Kufa, and other eastern cities were also noted places. Schools were opened in connection with the mosques (churches), a university after the old Greek model was founded, a large library was organized, and an observatory was built. Large numbers of students thronged the city, learned Greeks and Jews taught in the schools, and a number of advances on the scientific work done by the Greeks were made.

This eastern learning was now gradually carried to Spain by traveling Mohammedan scholars, and there the energy of conquest was gradually turned to the development of schools and learning. By 900 a good civilization and intellectual life had been developed in Spain, and before 1000 the teaching in Spain, especially along Greek philosophical lines, had become sufficiently known to attract a few adventurous monks from Christian Europe. In Cordova, Granada, Toledo, and Seville strong universities were developed, where Jews and Hellenized Mohammedans taught the learning of the East, and made further advances in the sciences and mathematics. Physics, chemistry, astronomy, mathematics, physiology, medicine, and surgery were the great subjects of study. Greek philosophy also was taught. They developed schools and large libraries, taught geography from globes, studied astronomy in observatories, counted time by pendulum clocks, invented the compass and gunpowder, developed hospitals, and taught medicine and surgery in schools (R. 86).



The Moslem West The Moslem East

Fig. 21. Showing Centers of Moslem Learning

Their cities were equally noteworthy for their magnificent palaces, mosques, public baths, market-places, aqueducts, and paved and lighted streets — things unknown in Christian Europe for centuries to come (R. 85). It became fashionable for wealthy men to become patrons of learning, and to collect large libraries and place them at the disposal of scholars, thus revealing interests in marked contrast to those of the fighting nobility of Christian Europe.

Their influence on western Europe. Western Europe of the tenth to the twelfth centuries presented a dreary contrast, in almost every particular, to the brilliant life of southern Spain. Just emerging from barbarism, it was still in an age of general disorder and of the simplest religious faith. The age of reason and of scientific experiment as a means of arriving at truth had not yet dawned, and would not do so for centuries to come. Monks and clerics, representing the one learned class, regarded this Moslem science as "black art," and in consequence Europe, centuries later, had slowly to rediscover the scientific knowledge which might have been had for the taking. Only the book science of Aristotle would the Church accept, and even this only after some hesitation (**Rs.** 89, 90).

Western Europe had, however, advanced far enough through the study of the Seven Liberal Arts to desire corrected and additional texts of the earlier classical writers, particularly Aristotle, and also to be willing to accept some of the mathematical knowledge of these Saracens. It was here that the Moslem learning in Spain helped in the intellectual awakening of the rest of Europe. Adelhard, an English monk, studied at Cordova about 1120, and took back with him some knowledge of arithmetic, algebra, and geometry. His *Euclid* was in general use in the universities by 1300. Gerard of Cremona, in Lombardy (1114–1187), who studied at Toledo a little later, rendered a similar service for Italy. He also translated many works from the Arabic, including Ptolemy's *Almagest*, a book of astronomical tables, and Alhazen's (Spanish scholar, c. 1100) book on Optics. Other monks studied in the Spanish cities during the twelfth century, a few of whom brought back translations of importance.

What Europe obtained through Moslem sources which it prized most, though, was the commentary on Aristotle by Averroës and the works of Aristotle (**R.** 88). The list of the books of Aristotle in use in the mediæval universities by 1300 (**R.** 87) reveals the great importance of the additions made. By the middle of the twelfth century Aristotle's *Ethics*, *Metaphysics*, *Physics*, and *Psychology*, as well as some of his minor works, had been translated into Latin and were beginning to be made available for study. Western Europe also was ready to use the Arabic (Hindu) system of notation, the elements of algebra, Euclid's geometry, and Ptolemy's work on the motion of the heavens. These contributions western Europe was ready for; the larger scientific knowledge of the Saracens, their pharmacopœias, dictionaries, cyclopædias, histories, and biographies, it was not yet ready to receive.

One other influence crept in from these peoples which was of large future importance — the music and light literature and love songs of Spain. There had been developed in this sunny land a life of light gayety, chivalrous gallantry, elegant courtesies, and poetic and musical charm, and this gradually found its way across the Pyrenees. At first it affected Provence and Languedoc, in southern France, then Sicily and Italy, and finally the gay contagion of lute and mandolin and love songs spread throughout all western Europe. A race of troubadours and minnesingers arose, singing in the vernacular, traveling about the country, and being entertained in castle halls.

> Lordlyng listneth to my tale
> Which is merryr than the nightengale

won admission at any castle gate. "Out of these genial but not orthodox beginnings the polite literature of modern Europe arose."

II. THE RISE OF SCHOLASTIC THEOLOGY

The eleventh century a turning-point. By the end of the eleventh century a distinct turning-point had been reached in the struggle to save civilization from perishing. From this time on it was clear that the battle had been won, and that a new Christian civilization would in time arise in western Europe. Much still remained to be done, and centuries of effort would be required, but the Church, almost for the first time in more than six hundred years, felt that it could now pause to organize and systematize its faith. The invasions and destruction of the Northmen had at last ceased, the Mohammedan conquests were over, almost the last of the Germanic tribes in Europe had settled down and had accepted Christianity, and the fighting nobility of Europe were being held somewhat in restraint by the might of the Church, the "Truce of God" (**R.** 79), and the softening influence of chivalric education (**R.** 80). There were many evidences, too, by the end of the eleventh century, that the western Christian world, after the long intellectual night, was soon to awaken to a new intellectual life. The twelfth century, in particular, was a period when it was evident that some new leaven was at work.

Up to about the close of the eleventh century western Europe had been living in an age of simple faith. The Christian world everywhere lay under "a veil of faith, illusion, and childish prepossession." The mysteries of Christianity and the many inconsistencies of its teachings and beliefs were accepted with childlike docility, and the Church had felt little call to organize, to systematize, or to explain.

Rise of the spirit of inquiry. As the cathedral schools grew in importance as teaching institutions, and came to have many teachers and students, a few of them became noted as places where good instruction was imparted and great teachers were to be found. Canterbury in England, Paris and Chartres in France, and several of the cities in northern Italy early were noted for the quality of their instruction. The great teachers and the keenest students of the time were to be found in the cathedral schools in these places, and the monastic schools now lost their earlier importance as teaching institutions. By the twelfth century they had been completely superseded as important teaching centers by the rapidly developing cathedral schools. To these more important cathedral schools students now came from long distances to study under some noted teacher.

The rise of scholastic theology. The Church, in a very intelligent and commendable manner, prepared to meet and use this new spirit in the organization, systematization, and restatement of its faith and doctrine, and the great era of Scholasticism now arose. During the latter part of the twelfth and in the thirteenth century Scholasticism was at its height; after that, its work being done, it rapidly declined as an educational force, and the new universities inherited the spirit which had given rise to its labors.

With the new emphasis now placed on reasoning, Dialectic or Logic superseded Grammar as the great subject of study, and logical analysis was now applied to the problems of religion. The Church adopted and guided the movement, and the schools of the time turned their energy into directions approved by it. Aristotle also was in time adopted by the Church, after the translation of his principal works had been effected (**Rs. 87, 90**), and his philosophy was made a bulwark for Christian doctrine throughout the remainder of the Middle Ages. For the next four centuries Aristotle thoroughly dominated all philosophic thinking. The great development and use of logical analysis now produced many keen and subtle minds, who worked intensively a narrow and limited field of thought. The result was a thorough reorganization and restatement of the theology of the Church.

Results of their work. The work of the Schoolmen was to organize and present in systematic and dogmatic form the teachings of the Church (**R. 92**). This they did exceedingly well, and the result was a thorough organization of Theology as a teaching subject. They did little to extend knowledge, and nothing at all to apply it to the problems of nature and man. Their work was abstract and philosophical instead, dealing wholly with theological questions. The purpose was to lay down principles, and to offer a training in analysis, comparison, classification, and deduction which would prepare learned and subtle defenders of the faith of the Church. So successful were the Schoolmen in their efforts that instruction in Theology was raised by their work to a new position of importance, and a new interest in theological scholarship and general learning was awakened which helped not a little to deflect many strong spirits from a life of warfare to a life of study. They made the problems of learning seem much more worth while, and their work helped to create a more tolerant attitude toward the supporters of either side of debatable questions by revealing so clearly that there are two sides to every question. This new learning, new interest in learning, and new spirit of tolerance the rising universities inherited.

III. LAW AND MEDICINE AS NEW STUDIES

The old Roman cities. The old Roman Empire, it will be remembered, came to be largely a collection of provincial cities. These were the centers of Roman civilization and culture. After the downfall of the governing power of Rome, the great highways were no longer repaired, brigandage became common, trade and intercourse largely ceased, and the provincial cities which were not destroyed in the barbarian invasions declined in population and number, passing under the control of their bishops who long ruled them as feudal lords. During the long period of disorder many of the old Roman cities entirely disappeared (**R. 49**). Only in Italy, and particularly in northern Italy, did these old cities retain anything of their earlier municipal life, or anything worth mentioning of their former industry and commerce. But even here they lost most of their earlier importance as centers of culture and trade, becoming merely ecclesiastical towns. After the death of Charlemagne, the break-up of his empire, and the institution of feudal conditions, the cities and towns declined still more in importance, and few of any size remained.

In Italy feudalism never attained the strength it did in northern Europe. Throughout all the early Middle Ages the cities there retained something of their old privileges, though ruled by prince-bishops residing in them. They also retained something of the old Roman civilization, and Roman legal usages and some knowledge of Roman law never quite died out. In other respects they much resembled mediæval cities elsewhere.

The Italian cities revive the study of Roman law. As was stated above, Roman legal usages and some knowledge of Roman law had never quite died out in these Italian cities. But, while regarded with reverence, the law was not much understood, little study was given to it, and important parts of it were neglected and forgotten. The struggle with the ruling bishops in the second half of the eleventh century, and the discussions which arose during the investiture conflict, caused new attention to be given to legal questions, and both the study of Roman (civil) and Church (canon) law were revived. The Italian cities stood with the Papacy in the struggles with the German kings, and, in 1167, those in the Valley of the Po formed what was known as the *Lombard League* for defense. Under the pressure of German oppression they now began a careful study of the known Roman law in an effort to discover some charter, edict, or grant of power upon which they could base their claim for independent legal rights. The result was that the study of Roman law was given an emphasis unknown in Italy since the days of the old Empire. What had been preserved during the period of disorder at last came to be understood, additional books of the law were discovered, and men suddenly awoke to a realization that what had been before considered as of little value actually contained much that was worth studying, as well as many principles of importance that were applicable to the conditions and problems of the time.

The great student and teacher of law of the period was Imerius of Bologna (c. 1070–1137), who began to lecture on the *Code* and *the Institutes* of Justinian about 1110 to 1115, and soon attracted large numbers of students to hear his interpretations. Law now ceased to be a part of Rhetoric and became a new subject of study, with a body of material large enough to occupy a student for several years. This was an event of great intellectual significance. A new study was now evolved which offered great possibilities for intellectual activity and the exercise of the critical faculty, while at the same time showing veneration for authority. Law was thus placed alongside Theology as a professional subject, and the evolution of the professional lawyer from the priest was now for the first time made possible.

Canon law also organized as a subject of study. Inspired by the revival of the study of civil law, a monk of Bologna, Gratian by name, set himself to make a compilation of all the Church canons which had been enacted since the Council of Nicæa (325) formulated the first twenty (p. 51), and of the rules for church government as laid down by the church authorities. This he issued in textbook form, about 1142, under the title of *Decretum Gratiani*. So successful were his efforts that his compilation was "one of those great textbooks that take the world by storm." It did for canon (church) law what the rediscovery of the Justinian *Digest* had done for civil law; that is, it organized canon law as a new and important teaching subject. Canon Law was thus separated from Theology and added to Civil Law as another new subject of study for both theological and legal students, and the two subjects of Canon and Civil Law came to constitute the work of the law faculties in the universities which soon arose in western Europe.

The beginnings of medical study. The Greeks had made some distinct progress in the beginnings of the study of disease. Aristotle had given some anatomical knowledge in his writings on animals, and had theorized a little about the functions of the human body. The real founder of medical science, though, was Hippocrates, of the island of Cos (c. 460–367 B.C.), a contemporary of Plato. He was the first writer on the subject who attempted to base the practice of the healing art on careful observation and scientific principles. He substituted scientific reason for the wrath of offended deities as the causes of disease, and tried to offer proper remedies in place of sacrifices and prayers to the gods for cures. His descriptions of diseases were wonderfully accurate, and his treatments ruled medical practice for ages. He knew, however, little as to anatomy. Another Greek writer, Galen (131–201 A.D.), wrote extensively on medicine and left an anatomical account of the human body which was unsurpassed for more than a thousand years. His work was known and used by the Saracens.

During the early Middle Ages the Greek medical knowledge practically disappeared, and in its place came the Christian theories of satanic influence, diabolic action, and divine punishment for sin. Correspondingly the cures were prayers at shrines and repositories of sacred relics and images, which were found all over Europe, and to which the injured or fever-stricken peasants hied themselves to make offerings and to pray, and then hope for a miracle.

Toward the middle of the eleventh century ancient Salerno, a small city delightfully situated on the Italian coast thirty-four miles south of Naples, began to attain some reputation as a health resort. In part this was due to the climate and in part to its mineral springs. Southern Italy had, more than any other part of western Europe, retained touch with old Greek thought. The works of Hippocrates and Galen had been preserved there, the monks at Monte Cassino had made some translations, and sometime toward the middle of the eleventh century the study of the Greek medical books was revived here. The Mohammedan medical work by Avicenna also early became known at Salerno in translation. About 1065 Constantine of Carthage, a converted Jew and a learned monk, who had traveled extensively in the East and who had been forced to flee from his native city because of a suspicion of "black art," began to lecture at Salerno on the Greek and Mohammedan medical works and the practice of the medical art. In 1099 Robert, Duke of Normandy, returning from the First Crusade, stopped here to be cured of a wound, and he and his knights later spread the fame of Salerno all over Europe. The result was the revival of the study of Medicine in the West, and Salerno developed into the first of the medical schools of Europe. Montpellier, in southern France, also became another early center for the study of Medicine, drawing much of its medical knowledge from Spain. Another new subject of professional study was now made possible, and Faculties of Medicine were in time organized in most of the universities as they arose. The instruction, though, was chiefly book instruction, Galen being the great textbook until the seventeenth century.

IV. OTHER NEW INFLUENCES AND MOVEMENTS

The Crusades. Perhaps the most romantic happenings during *the Middle Ages* were that series of adventurous expeditions to the then Far East, undertaken by the kings and knights of western Europe in an attempt to reclaim the Holy Land from the infidel Turks, who in the eleventh century had pushed in and were persecuting Christian pilgrims journeying to Jerusalem. In 1095 Pope Urban, in a stirring address to the Council of Clermont (France), issued a call to the lords, knights, and foot soldiers of western Christendom to cease destroying their fellow Christians in private warfare, and to turn their strength of arms against the infidel and rescue the Holy Land. The journey was to take the place of penance for sin, many special privileges were extended to those who went, and those who died on the journey or in battle with the infidels were promised entrance into heaven. To many nobles and peasants, filled with a desire for adventure and a sense of personal sin, no surer way of satisfying either was to be found than the long pilgrimage to the Saviour's tomb. In France and England the call met with instant response. Unfortunately for the future of civilization, the call met with but small response from the nobles of German lands.

Results of the Crusades on western Europe. In a sense the Crusades were an outward manifestation of the great change in thinking and ideals which had begun sometime before in western Europe. They were at once both a sign and a cause of further change. The old isolation was at last about to end, and intercommunication and some common ideas and common feelings were being brought about. Both those who went and those who remained at home were deeply stirred by the movement. Christendom as a great international community, in which all alike were interested in a common ideal and in a common fight against the infidel, was a new idea now dawning upon the mass of the people, whereas before it had been but little understood.

The travel to distant lands, the sight of cities of wealth and power, and the contact with peoples decidedly superior to themselves in civilization, not only excited the imagination and led to a broadening of the minds of those who returned, but served as well to raise the general level of intelligence in western Europe. Some new knowledge also was brought back, but that was not at the time of great importance. The principal gain came in the elimination forever of thousands of quarreling, fighting noblemen, thus giving the kingly power a chance to consolidate holdings and begin the *evolution* of modern States; in the marked *change of attitude toward* the old problems; in the awakening of a new interest in the present world; in the creation of new interests and new desires among the common people; in the awakening of a spirit of religious unity and of national consciousness; and especially in the awakening of a new intellectual life, which soon found expression in the organization of universities for study and in more extensive travel and geographical exploration than the world had known since the days of ancient Rome. The greatest of all the results, however, came through the revival of trade, commerce, manufacturing, and industry in the rising cities of western Europe, with the consequent evolution of a new and important class of merchants, bankers, and craftsmen, who formed a new city class and in time developed a new system of training for themselves and their children.

The revival of city life. The old cities of central and northern Italy, as was stated above (p. 102), continued through the early Middle Ages as places of some little local importance. In the eleventh century they overthrew in large part the rule of their Prince-Bishops, and became little City-Republics, much after the old Greek model. Outside of Italy almost the only cities not destroyed during the period of the barbarian invasions were the episcopal cities, that is cities which were the residences of bishops.

After about the year 1000 a revival of something like city life begins to be noticeable here and there in the records of the time (**R. 94 a**), and by 1100 these signs begin to manifest themselves in many places and lands. By 1200 the cities of Europe were numerous, though small, and their importance in the life of the times was rapidly increasing (**R. 94 b**).

The rise of a city class. As the mediæval towns increased in size and importance the inhabitants, being human, demanded rights. Between 1100 and 1200 there were frequent revolts of the people of the mediæval towns against their feudal overlord, and frequent demands were made for charters granting privileges to the towns. Sometimes these insurrections were put down with a bloody hand. Sometimes, on the contrary, the overlord granted a charter of rights, willingly or unwillingly, and freed the people from obligation to labor on the lands in return for a fixed money payment. Sometimes the king himself granted the inhabitants a charter by way of curbing the power of the local feudal lord or bishop. The towns became exceedingly skillful in playing off lord against bishop, and the king against both. In England, Flanders, France, and Germany some of the towns had become wealthy enough to purchase their freedom and a charter at some time when their feudal overlord was particularly in need of money. These charters, or birth certificates for the towns, were carefully drawn and officially sealed documents of great value, and were highly prized as evidences of local liberty. The document created a "free town," and gave to the inhabitants certain specified rights as to self-government, the election of magistrates — aldermen, mayor, burgomaster — the levying and payment of taxes, and the military service to be rendered. Before the evolution of strong national governments these charters created hundreds of what were virtually little City-States throughout Europe (**R. 95**).

In these towns a new estate or class of people was now created (**R. 96**), in between the ruling bishops and lords on the one hand and the peasants tilling the land on the other. These were the citizens — freemen, bourgeoisie, burghers. Out of this new class of city dwellers new social orders — merchants, bankers, tradesmen, artisans, and craftsmen — in time arose, and these new orders soon demanded rights and obtained some form of education for their children. The guild or apprenticeship education which early developed in the cities to meet the needs of artisans and craftsmen (**R. 99**), and the burgh or city schools of Europe, which began to develop in the thirteenth and fourteenth centuries, were the educational results of the rise of cities and the evolution of these new social classes. The time would soon be ripe for the mysteries of learning to be passed somewhat farther down the educational pyramid, and new classes in society would begin the mastery of its symbols.

Education for these new social classes. With the evolution of these new social classes an extension of education took place through the formation of guilds. The merchants of the Middle Ages traded, not as individuals, nor as subjects of a State which protected them, for there were as yet no such States, but as members of the guild of merchants of their town, or as members of a trading company. Later, towns united to form trading confederations, of which the Hanseatic League of northern Germany was a conspicuous example. These burgher merchant guilds became wealthy and important socially; they were chartered by kings and given trading privileges analogous to those of a modern corporation (**R. 95**); they elbowed their way into affairs of State, and in time took over in large part the city governments; they obtained education for themselves, and fought with the church authorities for the creation of independent burgh schools; they began to read books, and books in the vernacular began to be written for them; they in time vied with the clergy and the nobility in their patronage of learning; they everywhere stood with the kings and princes to compel feudal lords to stop warfare and plundering and to submit to law and order; and they entertained royal personages and drew nobles, clergy, and gentry into their honorary membership, thus serving as an important agency in breaking down the social-class exclusiveness of the Middle Ages. In these guilds, which were self-governing bodies debating questions and deciding policies and actions, much elementary political training was given their members which proved of large importance at a later time (**R. 96**).

In the same way the craft guilds rendered a large educational service to the small merchant and worker, as they provided the technical and social education of such during the later period of the Middle Ages and in early modern times, and protected their members from oppression in an age when oppression was the rule. With the revival of trade and industry craft guilds arose all over western Europe. One of the first of these was the candle-makers' guild, organized at Paris in 1061. Soon after we find large numbers of guilds — masons, shoemakers, harness-makers, bakers, smiths, wool-combers, tanners, saddlers, spurriers, weavers, goldsmiths, pewterers, carpenters, leather-workers, cloth-workers, pinners, fishmongers, butchers, barbers — all organized on much the same plan. These were the working-men's fraternities or labor unions of mediæval Europe. Each trade or craft became organized as a city guild, composed of the "masters," "journeymen" (paid workmen), and "apprentices." The great mediæval document, a charter of rights guaranteeing protection, was usually obtained. The guild for each trade laid down rules for the number and training of apprentices, the conditions under which a "journeyman" could become a "master," rules for conducting the trade, standards to be maintained in workmanship, prices to be charged, and dues and obligations of members (**R. 97**). They supervised work in their craft, cared for the sick, buried the dead, and looked after the widows and orphans. Often they provided one or more priests of their own to minister to the families of their craft, and gradually the custom arose of having the priest also teach something of the rudiments of religion and learning to the children of the members. In time money and lands were set aside or left for such purposes, and a form of chantry school, which later evolved into a regular school, often with instruction in higher studies added, was created for the children of members of the guild (**R. 98**).

Apprenticeship education. For centuries after the revival of trade and industry all manufacturing was on a small scale, and in the home-industry stage. There was, of course, no machinery, and only the simple tools known from ancient times were used. In a first-floor room at the back, master, journeymen, and apprentices working together made the articles which were sold by the master or the master's wife and daughter in the room in front. The manufacturer and merchant were one. Apprentices were bound to a master for a term of years (**R. 99**), often paying for the training and education to be received, and the master boarded and lodged both the apprentices and the paid workmen in the family rooms above the shop and store.

The form of apprenticeship education and training which thus developed, from an educational point of view, forms for us the important feature of the history of these craft guilds. With the subdivision of labor and the development of new trades the craft-guild idea was extended to the new occupations, and a steady stream of rural labor flowing to the towns was absorbed by them and taught the elements of social usages, self-government, and the mastery of a trade. Throughout all the long period up to the nineteenth century this apprenticeship education in a trade and in self-government constituted almost the entire formal education the worker with his hands received. The sons of the barbarian invaders, as well as their knightly brothers, at last were busy learning the great lessons of industry, coöperation, and personal loyalty. Here begins, for western Europe, "the nobility of labor — the long pedigree of toil." So well in fact did this apprentice system of training and education meet the needs of the time that it persisted, as was said above, well into the nineteenth century (**Rs. 200, 201, 242, 243**), being displaced only by modern power machinery and systematized factory methods. During the later Middle Ages and in modern times it rendered an important educational service; in the later nineteenth century it became such an obstacle to educational and industrial progress that it has had to be supplemented or replaced by systematic vocational education.

Influence of these new movements. We thus see, by the end of the twelfth century, a number of new influences in western Europe which point to an intellectual awakening and to the rise of a new educated class, separate from the monks and clergy on the one hand or the nobility on the other, and to the awakening of Europe to a new attitude toward life. Saracen learning, filtering across from Spain, had added materially to the knowledge Europe previously had, and had stimulated new intellectual interests. Scholasticism had begun its great work of reorganizing and systematizing theology, which was destined to free philosophy, hitherto regarded as a dangerous foe or a suspected ally, from theology and to remake entirely the teaching of the subject. Civil and canon law had been created as wholly new professional subjects, and the beginnings of the teaching of medicine had been made. Instead of the old Seven Liberal Arts and a very limited course of professional study for the clerical office being the entire curriculum, and Theology the one professional subject, we now find, by the beginning of the thirteenth century, a number of new and important professional subjects of large future significance — subjects destined to break the monopoly of theological study and put an end to logistic hair-splitting. The next step in the history of education came in the development of institutions where thinking and teaching could be carried on free from civil or ecclesiastical control, with the consequent rise of an independent learned class in western Europe. This came with the rise of the universities, to which we next turn, and out of which in time arose the future independent scholarship of Europe, America, and the world in general.

We also discover a series of new movements, connected with the Crusades, the rise of cities, and the revival of trade and industry, all of which clearly mark the close of the dark period of the Middle Ages. We note, too, the evolution of new social classes — a new Estate — destined in time to eclipse in importance both priest and noble and to become for long the ruling classes of the modern world. We also note the beginnings of an important independent system of education for the hand-workers which sufficed until the days of steam, machinery, and the evolution of the factory system. The eleventh and twelfth centuries were turning-points of great significance in the history of our western civilization, and with the opening of the wonderful thirteenth century the western world is well headed toward a new life and modern ways of thinking.

QUESTIONS FOR DISCUSSION

1. Why is it that a strong religious control is never favorable to originality in thinking?
2. Would it be possible for any people anywhere in the world to-day to make such advances as were made at Bagdad, in the late eighth and early ninth centuries, without such work permanently influencing the course of civilization and learning everywhere? To what is the difference due?
3. What were the chief obstacles to Europe adopting at once the learning from Mohammedan Spain, instead of waiting centuries to discover this learning independently?
4. Why did Aristotle's work seem of much greater value to the mediæval scholar than the Moslem science? What are the relative values to-day?
5. Why should the light literature of Spain be spoken of as a gay contagion? Did this Christian attitude toward fiction and poetry continue long?
6. How did the fact that Dialectic (Logic) now became the great subject of study in itself denote a marked intellectual advance? What was the significance of the prominence of this study for the future of thinking?
7. How do you explain the all-absorbing interest in scholasticism during the greater part of a century?
8. State the significance, for the future, of the revival of the study of Roman law: (*a*) intellectually; (*b*) in shaping future civilization.
9. How do you explain the Christian attitude toward disease, and the scientific treatment of it? Has that attitude entirely passed away? Illustrate.
10. Why was it such a good thing for the future of civilization in England and France that so many of its nobility perished in the Crusades?
11. State a number of ways in which the Crusade movements had a beneficial effect on western Europe.
12. Contrast a mediæval guild and a modern labor union. A guild and a modern fraternal and benevolent society.
13. Why did apprenticeship education continue so long with so little change, when it is now so rapidly being superseded?
14. Does the rise of a new Estate in society indicate a period of slow or rapid change? Why is such an evolution of importance for education and civilization?

SELECTED READINGS

In the accompanying *Book of Readings* the following selections are reproduced:

85. Draper: The Moslem Civilization in Spain.
86. Draper: Learning among the Moslems in Spain.
87. Norton: Works of Aristotle known by 1300.
88. Averroës: On Aristotle's Greatness.
89. Roger Bacon: How Aristotle was received at Oxford.
90. Statutes: How Aristotle was received at Paris.
    (*a*) Decree of Church Council, 1210 A.D.
    (*b*) Statutes of Papal Legate, 1215 A.D.
    (*c*) Statutes of Pope Gregory, 1231 A.D.
    (*d*) Statutes of the Masters of Arts, 1254 A.D.
91. Cousin: Abelard's *Sic et Non*.
    (*a*) From the Introduction.
    (*b*) Types of Questions raised for Debate.

92. Rashdall: The Great Work of the Schoolmen.
93. Justinian: Preface to the Justinian Code.
94. Giry and Réville: The Early Mediæval Town.
    (*a*) To the Eleventh Century.
    (*b*) By the Thirteenth Century.
95. Gross: An English Town Charter.
96. London: Oath of a New Freeman in a Mediæval Town.
97. Riley: Ordinances of the White-Tawyers' Guild.
98. State Report: School of the Guild of Saint Nicholas.
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Townsend, W. J. *The Great Schoolmen of the Middle Ages.*

CHAPTER IX

THE RISE OF THE UNIVERSITIES

Evolution of the *Studium Generale*. In the preceding chapter we described briefly the new movement toward association which characterized the eleventh and the twelfth centuries — the municipal movement, the merchant guilds, the trade guilds, etc. These were doing for civil life what monasticism had earlier done for the religious life. They were collections of like-minded men, who united themselves into associations or guilds for mutual benefit, protection, advancement, and self-government within the limits of their city, business, trade, or occupation. This tendency toward association, in the days when state government was weak or in its infancy, was one of the marked features of the transition time from the early period of the Middle Ages, when the Church was virtually the State, to the later period of the Middle Ages, when the authority of the Church in secular matters was beginning to weaken, modern nations were beginning to form, and an interest in worldly affairs was beginning to replace the previous inordinate interest in the world to come.

We also noted in the preceding chapters that certain cathedral and monastery schools, but especially the cathedral schools, stimulated by the new interest in Dialectic, were developing into much more than local teaching institutions designed to afford a supply of priests of some little education for the parishes of the bishopric. Once York and later Canterbury, in England, had had teachers who attracted students from other bishoprics. Paris had for long been a famous center for the study of the Liberal Arts and of Theology. Saint Gall had become noted for its music. Theologians coming from Paris (1167–68) had given a new impetus to study among the monks at Oxford. A series of political events in northern Italy had given emphasis to the study of law in many cities, and the Moslems in Spain had stimulated the schools there and in southern France to a study of medicine and Aristotelian science. Rome was for long a noted center for study. Gradually these places came to be known as *studia publica*, or *studia generalia*, meaning by this a generally recognized place of study, where lectures were open to any one, to students of all *countries and of all conditions*. Traveling students came to these places from afar to hear some noted teacher read and comment on the famous textbooks of the time (**R. 101**).

The university evolution. The development of a university out of a cathedral or some other form of school represented, in the Middle Ages, a long local evolution. Universities were not founded then as they are to-day. A teacher of some reputation drew around him a constantly increasing body of students. Other teachers of ability, finding a student body already there, also "set up their chairs" and began to teach. Other teachers and more students came. In this way a *studium* was created. About these teachers in time collected other university servants — "bedells, librarians, lower officials, preparers of parchment, scribes, illuminators of parchment, and others who serve it," as Count Rupert enumerated them in the Charter of Foundation *granted, in 1386, to* Heidelberg (**R. 103**). At Salerno, as we have

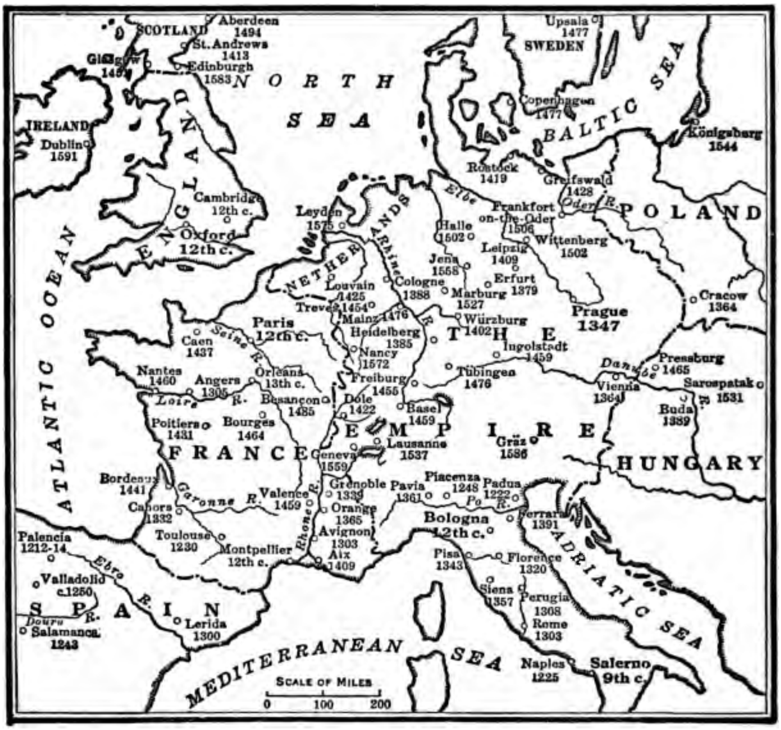

FIG. 22. SHOWING LOCATION OF THE CHIEF UNIVERSITIES FOUNDED BEFORE 1600

already seen (p. 104), medical instruction arose around the work of Constantine of Carthage and the medicinal springs found in the vicinity. Students journeyed there from many lands, and licenses to practice the medical art were granted there as early as 1137. At Bologna, we have also seen (p. 102), the work of Imerius and Gratian early made this a great center for the study of civil and canon law, and their pupils spread the taste for these new subjects throughout Europe. Paris for two centuries had been a center for the study of the Arts and of Theology, and a succession of famous teachers.

The guild idea; early privileges. By the beginning of the thirteenth century both students and teachers had become so numerous, at a number of these *studia generalia* in western Europe, that they began to adopt the favorite mediæval practice and organized themselves into associations, or guilds, for further protection from extortion and oppression and for greater freedom from regulation by the Church. They now sought and obtained additional privileges for themselves, and, in particular, the great mediæval document — a charter of rights and privileges. As both teachers and students were for long regarded as *clerici* the charters were usually sought from the Pope, but in some cases they were obtained from the king. These associations of scholars, or teachers, or both, "born of the need of companionship which men who cultivate their intelligence feel," sought to perform the same functions for those who studied and taught that the merchant and craft guilds were performing for their members. The ruling idea was association for protection, and to secure freedom for discussion and study; the obtaining of corporate rights and responsibilities; and the organization of a system of apprenticeship, based on study and developing through journeyman into mastership, as attested by an examination and the license to teach. In the rise of these teacher and student guilds we have the beginnings of the universities of western Europe, and their organization into chartered teaching groups (**R. 100**) was simply another phase of that great movement toward the association of like-minded men for worldly purposes which began to sweep over the rising cities in the eleventh and twelfth centuries.

One of the most important privileges which the universities early obtained, and a rather singular one at that, was the right of *cessatio,* which meant the right to stop lectures and go on a strike *as a means of enforcing* a redress of grievances against either town or church authority (**R. 107**). This right was for long jealously guarded by the university, and frequently used to defend itself from the smallest encroachments on its freedom to teach, study, and discipline the members of its guild as it saw fit, and often the right not to discipline them at all. Often the *cessatio* was invoked on very trivial grounds, as in the case of the Oxford *cessatio* of 1209 (**R. 108**), the Paris *cessatio* of 1229 (**R. 109**), and the numerous other *cessationes* which for two centuries repeatedly disturbed the continuity of instruction at Paris.

Degrees in the guild. The most important of the university rights, however, was the right to examine and license its own teachers (**R. 110**), and to grant the license to teach (**Rs. 111, 112**). Founded as the universities were after the guild model, they were primarily places for the taking of apprentices in the Arts, developing them into journeymen and masters, and certifying to their proficiency in the teaching craft. Their purpose at first was to prepare teachers, and the giving of instruction to students for cultural ends, or a professional training for practical use aside from teaching the subject, was a later development.

Accordingly it came about in time that, after a number of years of study in the Arts under some master, a student was permitted to present himself for a test as to his ability to define words, determine the meaning of phrases, and read the ordinary Latin texts in Grammar, Rhetoric, and Logic (the *Trivium*), to the satisfaction of other masters than his own. In England this test came to be known by the term *determine.* Its passage was equivalent to advancing from apprenticeship to the ranks of a journeyman, and the successful candidate might now be permitted to assist the master, or even give some elementary instruction himself while continuing his studies. He now became an assistant or companion, and by the fourteenth century was known as a *baccalaureus*, a term used in the Church, in chivalry, and in the guilds, and which meant a *beginner.* There was at first, though, no thought of establishing an examination and a new degree for the completion of this first step in studies. The bachelor's degree was a later development, sought at first by those not intending to teach, and eventually erected into a separate degree.

When the student had finally heard a sufficient number of courses, as required by the statutes of his guild, he might present himself for examination for the teaching license. This was a public trial, and took the form of a public disputation on some stated thesis, in the presence of the masters, and against all comers. It was the student's "masterpiece," analogous to the masterpiece of any other guild, and he submitted it to a jury of the masters of his craft. Upon his masterpiece being adjudged satisfactory, he also became a master in his craft, was now able to define and dispute, was formally admitted to the highest rank in the teaching guild, might have a seal, and was variously known as master, doctor, or professor, all of which were once synonymous terms. If he wished to prepare himself for teaching one of the professional subjects he studied still further, usually for a number of years, in one of the professional faculties, and in time he was declared to be a Doctor of Law, or Medicine, or of Theology.

The teaching faculties. On the side of the students the university organization was by nations; on the side of the masters the organization was by teaching subjects, and into what came to be known as *faculties*.

The Arts Faculty was the successor of the old cathedral-school instruction in the Seven Liberal Arts, and was found in practically all the universities. The Law Faculty embraced civil and canon law, as worked out at Bologna. The Medical Faculty taught the knowledge of the medical art, as worked out at Salerno and Montpellier. The Theological Faculty, the most important of the four, prepared learned men for the service of the Church, and was for some two centuries controlled by the scholastics. The Arts Faculty was preparatory to the other three. As Latin was the language of the classroom, and all the texts were Latin texts, a reading and speaking knowledge of Latin was necessary before coming to the university to study.

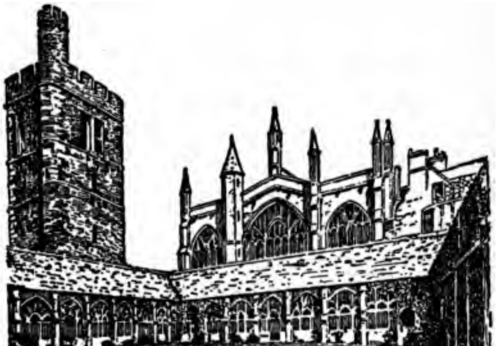

FIG. 23. NEW COLLEGE, AT OXFORD

One of the oldest of the Oxford colleges, having been founded in 1379. The picture shows the chapel, cloisters (consecrated in 1400), and a tall tower, once forming a part of the Oxford city walls.

This was obtained from a study of the first of the Seven Arts — Grammar — in some monastery, cathedral, or other type of school. Thus a knowledge of Latin formed practically the sole requirement for admission to the mediæval university, and continued to be the chief admission requirement in our universities up to the nineteenth century (**R. 186 a**). In Europe it is still of great importance as a preparatory subject, but in South American countries it is not required at all.

Very few of the universities, in the beginning, had all four of these faculties. The very nature of the evolution of the earlier ones precluded this. Thus Bologna had developed into a *studium generale* from its prominence in law, and was virtually constituted a university in 1158, but it did not add Medicine until 1316, or Theology until 1360. These four traditional faculties were well established by the fourteenth century, and continued as the typical form of university organization until modern times. With the great university development and the great multiplication of subjects of study which characterized the nineteenth century, many new faculties and schools and colleges have had to be created, particularly in the United States, in response to new modern demands.

Methods of instruction. A very important reason why so long a period of study was required in each of the professional faculties, as well as in the Faculty of Arts, is to be found in the lack of textbooks and the methods of instruction followed. While the standard textbooks were becoming much more common, due to much copying and the long-continued use of the same texts, they were still expensive and not owned by many. To provide a loan collection of theological books for poor students we find, in 1271, a gift by will to the University of Paris (**R. 119**) of a private library, containing twenty-seven books. Even if the students possessed books, the master "read" and commented from his "gloss" at great length on the texts being studied. Besides the mere text each teacher had a "gloss" or commentary for it — that is, a mass of explanatory notes, summaries, cross-references, opinions by others, and objections to the statements of the text. The "gloss" was a book in itself, often larger than the text, and these standard glosses, or commentaries, were used in the university instruction for centuries. In Theology and Canon Law they were particularly extensive.

It will be seen that both students and professors were bound to the text, as were the teachers of the Seven Liberal Arts in the cathedral schools before them. There was no appeal to the imagination, still less to observation, experiment, or experience. Each generation taught what it had learned, except that from time to time some thinker made a new organization, or some new body of knowledge was unearthed and added.

The disputation; equipment. A method much used was the disputation, and participation in a number of these was required for degrees (R. 116). These were logical contests, not unlike a modern debate, in which the students took sides, cited authorities, and summarized arguments, all in Latin. Sometimes a student gave an exhibition in which he debated both sides of a question, and summarized the argument, after the manner of the professors. As a corrective to the memorization of lectures and texts, these

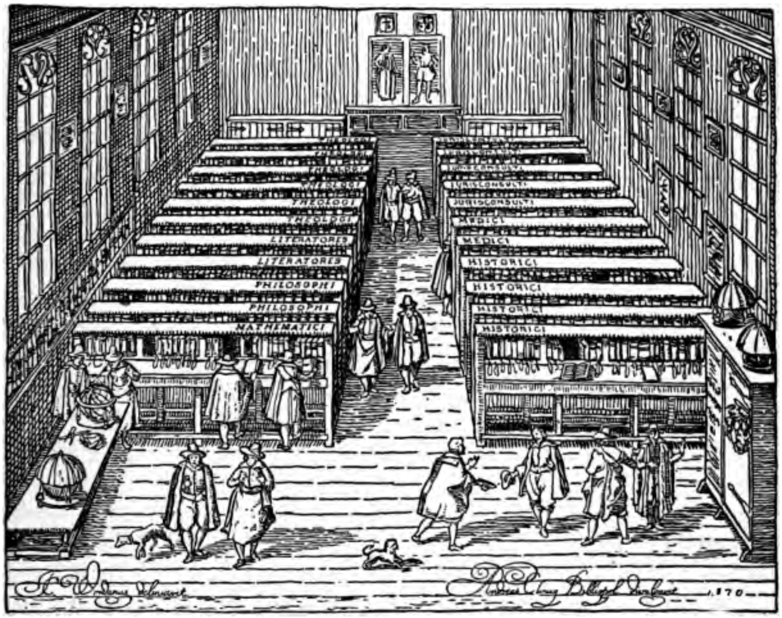

FIG. 24. LIBRARY OF THE UNIVERSITY OF LEYDEN, IN HOLLAND

(After an engraving by J. C. Woudanus, dated 1610)

This shows well the chained books, and a common type of bookcase in use in monasteries, churches, and higher schools. Counting 35 books to the case, this shows a library of 35 volumes on mathematics; 70 volumes each on literature, philosophy, and medicine; 140 volumes of historical books; 175 volumes on civil and canon law; and 160 volumes on theology, or a total of 770 volumes — a good-sized library for the time.

disputations served a useful purpose in awakening intellectual vigor and logical keenness. They were very popular until into the sixteenth century, when new subject-matter and new ways of thinking offered new opportunities for the exercise of the intellect.

In teaching equipment there was almost nothing at first, and but little for centuries to come. Laboratories, workshops, *gymnasia*, good buildings and classrooms — all alike were equally unknown. Time schedules of lectures (**Rs. 122, 123**) came in but slowly, in such matters each professor being a free lance. Nor were there any libraries at first, though in time these developed. For a long time books were both expensive and scarce (**Rs. 78, 119, 120**). After the invention of printing (first book printed in 1456), university libraries increased rapidly and soon became the chief feature of the university equipment. Figure 24 shows the library of the University of Leyden, in Holland, thirty-five years after its foundation, and about one hundred and fifty years after the beginnings of printing. It shows a rather large increase in the size of book collections after the introduction of printing, and a good library organization.

Value of the training given. Measured in terms of modern standards the instruction was undoubtedly poor, unnecessarily drawn out, and the educational value low. We could now teach as much information, and in a better manner, in but a fraction of the time then required. Viewed also by the standards of instruction in the higher schools of Greece and Rome the conditions were almost equally bad. Viewed, though, from the standpoint of what had prevailed in western Europe during the dark period of the early Middle Ages, it represented a marked advance in method and content — except in pure literature, where there was an undoubted decline due to the absorbing interest in Dialectic — and it particularly marked a new spirit, as nearly critical as the times would allow. Despite the heterogeneous and but partially civilized student body, youthful and but poorly prepared for study, the drunkenness and fighting, the lack of books and equipment, the large classes and the poor teaching methods, and the small amount of knowledge which formed the grist for their mills and which they ground exceeding small, these new universities held within themselves, almost in embryo form, the largest promise for the intellectual future of western Europe which had appeared since the days of the old universities of the Hellenic world

(R. 124). In these new institutions knowledge was not only preserved and transmitted, but was in time to be tremendously advanced and extended. They were the first organizations to break the monopoly of the Church in learning and teaching; they were the centers to which all new knowledge gravitated; under their shadow thousands of young men found intellectual companionship and in their classrooms intellectual stimulation; and in encouraging "laborious subtlety, heroic industry, and intense application," even though on very limited subject-matter, and in training "men to think and work rather than to enjoy" (R. 124), they were preparing for the time when western Europe should awaken to the riches of Greece and Rome and to a new type of intellectual life of its own. From these beginnings the university organization has persisted and grown and expanded, and to-day stands, the Catholic Church alone excepted, as the oldest organized institution of human society.

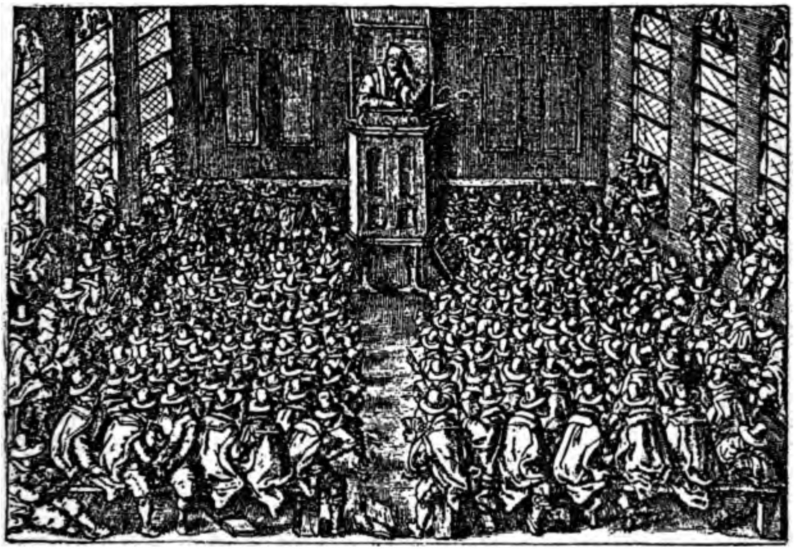

FIG. 25. A UNIVERSITY LECTURE AND LECTURE ROOM
(From a woodcut printed at Strassburg, 1608)

The manifest tendency of the universities toward speculation, though for long within limits approved by the Church, was ultimately to awaken *inquiry, investigation, rational thinking, and to bring forth the modern spirit.* The preservation and transmission of knowledge was by the university organization transferred from the monastery to the school, from monks to doctors, and from the Church to a body of logically trained men, only nominally members of the *clerici*. Their successors would in time entirely break away from connections with either Church or State, and stand forth as the independent thinkers and scholars in the arts, sciences, professions, and even in Theology. University graduates in Medicine would in time wage a long struggle against bigotry to lay the foundations of modern medicine. Graduates in Law would contend with kings and feudal lords for larger privileges for the as yet lowly common man, and would help to usher in a period of greater political equality. The university schools of Theology were in time to send forth the keenest critics of the practices of the Church. Out of the university cloisters were to come the men — Dante, Petrarch, Wycliffe, Huss, Luther, Calvin, Copernicus, Galileo, Newton — who were to usher in the modern spirit.

The universities as a public force. Almost from the first the universities availed themselves of their privileges and proclaimed a bold independence. The freedom from arrest and trial by the civil authorities for petty offenses, or even for murder, and the right to go on a strike if in any way interfered with, were but beginnings in independence in an age when such independence seemed important. These rights were in time given up, and in their place the much more important rights of liberty to study as truth seemed to lead, freedom in teaching as the master saw the truth, and the right to express themselves as an institution on public questions which seemed to concern them, were slowly but definitely taken on in place of the earlier privileges. Virtually a new type of members of society — a new Estate — was evolved, ranking with Church, State, and nobility, and this new Estate soon began to express itself in no uncertain tones on matters which concerned both Church and State. The universities were democratic in organization and became democratic in spirit, representing a heretofore unknown and unexpressed public opinion in western Europe.

In an age of oppression these university organizations stood for freedom. In an age of force they began the substitution of reason. In the centuries from the end of the Dark Ages to the Reformation they were the homes of free thought. They early assumed national character and proclaimed a bold independence. Questions of State and Church they discussed with a freedom before unknown. They presented their grievances to both kings and popes, from both they obtained new privileges, to both they freely offered their advice, and sometimes both were forced to do their bidding. For the first time since the downfall of Rome the administration of human affairs was now placed once more in the hands of educated men. By the interchange of students from all lands and their hospitality, such as it was, to the stranger, the universities tended to break down barriers and to prepare Europe for larger intercourse and for more of a common life.

On the masses of the people, of course, they had little or no influence, and could not have for centuries to come. Their greatest work, as has been the case with universities ever since their foundation, was that of drawing to their classrooms the brightest minds of the times, the most capable and the most industrious, and out of this young raw material training the leaders of the future in Church and State. Educationally, one of their most important services was in creating a surplus of teachers in the Arts who had to find a market for their abilities in the rising secondary schools. These developed rapidly after 1200, and to these we owe a somewhat more general diffusion of the little learning and the intellectual training of the time. In preparing future leaders for State and Church in law, theology, and teaching, the universities, though sometimes opposed and their opinions ignored, nevertheless contributed materially to the making and moulding of national history. The first great result of their work in training leaders we see in the Renaissance movement of the fourteenth and fifteenth centuries, to which we next turn. In this movement for a revival of the ancient learning, and the subsequent movements for a purer and a better religious life, the men trained by the universities were the leaders.

QUESTIONS FOR DISCUSSION

1. Why would the *studia publica* tend to attract a different type of scholar than those in the monasteries, and gradually to supersede them in importance?
2. Show how the mediæval university was a gradual and natural evolution, as distinct from a founded university of to-day.
3. Show that the university charter was a first step toward independence from church and state control.
4. Show the relation between the system of apprenticeship developed for student and teacher in a mediæval university, and the stages of student and teacher in a university of to-day.

5. Show how the chartered university of the Middle Ages was an "association of like-minded men for worldly purposes."
6. Do university professors to-day have privileges akin to those granted professors in a mediæval university?
7. What has caused the old Arts Faculty to break up into so many groups, whereas Law, Medicine, and Theology have stayed united?
8. Do universities, when founded to-day, usually start with all four of the mediæval faculties represented?
9. Which of the professional faculties has changed most in the nature and character of its instruction? Why has this been so?
10. Enumerate a number of different things which have enabled the modern university greatly to shorten the period of instruction?
11. Aside from differences in teachers, why are some university subjects today taught much more compactly and economically than other subjects?
12. After admitting all the defects of the mediæval university, why did the university nevertheless represent so important a development for the future of western civilization?
13. What does the long continuance, without great changes in character, of the university as an institution indicate as to its usefulness to society?
14. Does the university of to-day play as important a part in the progress of society as it did in the mediæval times? Why?
15. Show how the mediæval university put books in the place of things, whereas the modern university tries to reverse this.
16. Show how the rise of the universities gave an educated ruling class to Europe, even though the nobility may not have attended them.
17. Show how, in an age of lawlessness, the universities symbolized the supremacy of mind over brute force.
18. Show how the mediæval universities aided civilization by breaking down, somewhat, barriers of nationality and ignorance among peoples.
19. Show how the university stood, as the crowning effort of its time, in the slow upward struggle to rebuild civilization on the ruins of what had once been.

SELECTED READINGS

In the accompanying *Book of Readings* the following selections are reproduced:

100. Rashdall and Minerva: University Foundations before 1600.
101. Fr. Barbarossa: Privileges for Students who travel for Study.
102. Philip Augustus: Privileges granted Students at Paris.
103. Count Rupert: Charter of the University of Heidelberg.
104. Philip IV: Exemption of Students and Masters from Taxation.
105. Vercelli: Privileges granted to the University by the City.
106. Villani: The Cost to a City of maintaining a University.
107. Pope Gregory IX: Right to suspend Lectures (*Cessatio*).
108. Roger of Wendover: a *Cessatio* at Oxford.
109. Henry III: England invites Scholars to leave Paris.
110. Pope Gregory IX: Early Licensing of Professors to teach.
111. Pope Nicholas IV: The Right to grant Licenses to teach.
112. Rashdall: A University License to teach.
113. Paris Statutes, 1254: Books required for the Arts Degree.
114. Leipzig Statutes, 1410: Books required for the Arts Degree.
115. Oxford Statutes, 1408–31: Books required for the Arts Degree.

116. Oxford, Fourteenth Century: Requirements for the Professional Degrees.

(*a*) In Theology.	(*c*) In Civil Law.
(*b*) In Canon Law.	(*d*) In Medicine.

117. Paris Statutes, 1270–74: Requirements for the Medical Degree.
118. Roger Bacon: On the Teaching of Theology.
119. Master Stephen: Books left by Will to the University of Paris.
120. Roger Bacon: The Scarcity of Books on Morals.
121. Balæus: Methods of Instruction in the Arts Faculty of Paris.
122. Toulouse: Time-Table of Lectures in Arts, 1309.
123. Leipzig: Time-Table of Lectures in Arts, 1519.
124. Rashdall: Value and Influence of the Mediæval University.

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*Jebb, R. C. *The Work of the Universities for the Nation.*
Mullinger, J. B. *History of the University of Cambridge.*
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*Paetow, L. J. *The Arts Course at Mediæval Universities.* (Univ. Ill. Studies, vol. III, no. 7, Jan. 1910).
*Paulsen, Fr. *The German Universities.*
Rait, R. S. *Life of a Mediæval University.*
*Rashdall, H. *Universities of Europe in the Middle Ages.*
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Sheldon, Henry. *Student Life and Customs.*

PART III

THE TRANSITION FROM MEDIÆVAL TO MODERN ATTITUDES

⁂

THE RECOVERY OF THE ANCIENT LEARNING
THE REAWAKENING OF SCHOLARSHIP
AND THE RISE OF RELIGIOUS
AND SCIENTIFIC INQUIRY

CHAPTER X

THE REVIVAL OF LEARNING

The period of change. The thirteenth century has often been called the wonderful century of the mediæval world. It was wonderful largely in that the forces struggling against mediævalism to evolve the modern spirit here first find clear expression. It was a century of rapid and unmistakable progress in almost every line. By its close great changes were under way which were destined ultimately to shake off the incubus of mediævalism and to transform Europe. In many respects, though, the fourteenth was a still more wonderful century.

The evolution of the universities which we have just traced was one of the most important of these thirteenth-century manifestations. Lacking in intellectual material, but impelled by the new impulses beginning to work in the world, the scholars of the time went earnestly to work, by speculative methods, to organize the dogmatic theology of the Church into a system of thinking. The result was Scholasticism. From one point of view the result was barren; from another it was full of promise for the future. Though the workers lacked materials, were overshadowed by the mediæval spirit of authority, and kept their efforts clearly within limits approved by the Church, the "heroic industry" and the "intense application" displayed in effecting the organization, and the logical subtlety developed in discussing the results, promised much for the future. The rise of university instruction, and the work of the Scholastics in organizing the knowledge of the time, were both a resultant of new influences already at work and a prediction of larger consequences to follow. In a later age, and with men more emancipated from church control, the same spirit was destined to burst forth in an effort to discover and reconstruct the historic past.

During the thirteenth century, too, the new Estate, which had come into existence alongside of the clergy and the nobility, began to assume large importance. The arts-and-crafts guilds were attaining a large development, and out of this new burgher class the great general public of modern times has in time evolved. Trade and industry were increasing in all lands, and merchants and successful artisans were becoming influential through their newly obtained wealth and rights. The erection of stately churches and town halls, often beautifully carved and highly ornamented, was taking place. Great cathedrals, those "symphonies in stone," of which Notre Dame is a good example, were rising or being further expanded and decorated at many places in western Europe.

The new spirit of nationality. The new spirit now moving in western Europe also found expression in the evolution of the modern European States, based on the new national feeling. New national languages also were coming into being, and the national epics of the people — the Cid, the Arthurian Legends, the *Chansons*, and the *Nibelungen Lied* — were reduced to writing. With the introduction from the East, toward the close of the thirteenth century, of the process of making paper for writing, and with the increase of books in the vernacular, the English, French, Spanish, Italian, and German languages rapidly took shape. Their development was expressive of the new spirit in western Europe, as also was the fact that Dante (1264–1321), "the first literary layman since Boethius" (d. 524), wrote his great poem, *The Divine Comedy*, in his native Italian instead of in the Latin which he knew so well — an evidence of independence of large future import. New native literatures were springing forth all over Europe. Beginning with the *troubadours* in southern France (p. 99), and taken up by the *trouvères* in northern France and by the *minnesingers* in German lands, the new poetry of nature and love and joy of living had spread everywhere. A new race of men was beginning to "sing songs as blithesome and gay as the birds" and to express in these songs the joys of the world here below.

Transformation of the mediæval man. The fourteenth century was a period of still more rapid change and transformation. New objects of interest were coming to the front, and new standards of judgment were being applied. National spirit and a national patriotism were finding expression. The mediæval man, with his feeling of personal insignificance, lack of self-confidence, "no sense of the past behind him, and no conception of the possibilities of the future before him," was rapidly giving way to the man possessed of the modern spirit — the man of self-confidence, conscious of his powers, enjoying life, feeling his connection with the historic past, and realizing the potentialities of accomplishment in the world here below. It was the great work of the period of transition, and especially of the thirteenth and fourteenth centuries, to effect this change, "to awaken in man a consciousness of his powers, to give him confidence in himself, to show him the beauty of the world and the joy of life, and to make him feel his living connection with the past and the greatness of the future he might create." As soon as men began clearly to experience such feelings, they began to inquire, and inquiry led to the realization that there had been a great historic past of which they knew but little, and of which they wanted to know much. When this point had been reached, western Europe was ready for a revival of learning.

The beginnings in Italy. This revival began in Italy. The Italians had preserved more of the old Roman culture than had any other people, and had been the first to develop a new political and social order and revive the refinements of life after the deluge of barbarism which had engulfed Europe. They, too, had been the first to feel the inadequacy of mediæval learning to satisfy the intellectual unrest of men conscious of new standards of life. This gave them at least a century of advance over the nations of northern Europe. The old Roman life also was nearer to them, and meant more, so that a movement for a revival of interest in it attracted to it the finest young minds of central and northern Italy and inspired in them something closely akin to patriotic fervor. They felt themselves the direct heirs of the political and intellectual eminence of Imperial Rome, and they began the work of restoring to themselves and of trying to understand their inheritance.

FIG. 26. PETRARCH (1304–74)
"The Morning Star of the Renaissance"

In Petrarch (1304–74) we have the beginnings of the movement. He has been called "the first modern scholar and man of letters." Repudiating the other-worldliness ideal and the scholastic learning of his time, possessed of a deep love for beauty in nature and art, a delight in travel, a desire for worldly fame, a strong historical sense, and the self-confidence to plan a great constructive work, he began the task of unearthing the monastic treasures to ascertain what the past had been and known and done. At twenty-nine he made his first great discovery, at Liège, in the form of two previously unknown orations of Cicero. Twelve years later, at Verona, he found half of one of the letters of Cicero which had been lost for ages. All his life he collected and copied manuscripts. His letter to a friend telling him of his difficulty in getting a work of Cicero copied, and his joy in doing the work himself (**R. 125**), is typical of his labors.

FIG. 27. BOCCACCIO (1313–75)
"The Father of Italian Prose"

Through Boccaccio, whom he first met in 1350, Petrarch's work was made known in Florence, then the wealthiest and most artistic and literary city in the world, and there the new knowledge and method were warmly received. Boccaccio equaled Petrarch in his passion for the ancient writers, hunting for them wherever he thought they might be found. One of his pupils has left us a melancholy picture of the library at Monte Cassino, as Boccaccio found it at the time of his visit (**R. 126**). He wrote a book of popular tales and romances, filled with the modern spirit, which made him the father of Italian prose as Dante was of Italian poetry; prepared the first dictionaries of classical geography and Greek mythology; and was the first western scholar to learn Greek.

"In the dim light of learning's dawn they stand,
Flushed with the first glimpses of a long-lost land."

A century of recovery and reconstruction. The work done by these two friends in discovering and editing was taken up by others, and during the century (1333–1433) dating from the first great "find" of Petrarch the principal additions to Latin literature were made. The monasteries and castles of Europe were ransacked in the hope of discovering something new, or more accurate copies of previously known books. At monasteries and churches as widely separated as Monte Cassino, near Naples; Lodi, near Milan; Milan, itself; and Vercelli, in Italy: Saint Gall and other monasteries, in Switzerland: Paris; Cluny, near the present city of Macon; Langres, near the source of the Marne; and monasteries in the Vosges Mountains, in France: Corvey, in Westphalia; and Hersfeld, Cologne, and Mainz in Germany — important finds were made. Thus widely had the old Latin authors been scattered, copied, and forgotten. In a letter to a friend (**R. 127 a**) the enthusiast, Poggio Bracciolini, tells of finding (1416) the long-lost *Institutes of Oratory* of Quintilian, at Saint Gall, and of copying it for posterity. This, and the reply of his friend (**R. 127 b**), reveal something of the spirit and the emotions of those engaged in the recovery of Latin literature and the reconstruction of Roman history.

The finds, though, while important, were after all of less value than the spirit which directed the search, or the careful work which was done in collecting, comparing, questioning, inferring, criticizing, and editing corrected texts, and reconstructing old Roman life and history. We have in this new work a complete break with scholastic methods, and we see in it the awakening of the modern scientific spirit. It was this same critical, constructive spirit which, when applied later to Christian practices, brought on the Reformation; when applied to the problems of the universe, revealed to men the wonderful world of science; and when applied to problems of government, led to the questioning of the theory of the divine right of kings, and to the evolution of democracy. We have here a modern spirit, a craving for truth for its own sake, an awakening of the historical sense, and an appreciation of beauty in literature and nature which was soon to be followed by an appreciation of beauty in art.

The revival of Greek in the West. With the new interest in Latin literature it was but natural that a revival of the study of Greek should follow. While a knowledge of Greek had not absolutely died out in the West during the Middle Ages, there were very few scholars who knew anything about it, and none who could read it. It was natural, too, that the revival of it should come first in Italy.

Near the end of the fourteenth century it became known in Florence that Manuel Chrysoloras (c. 1350–1415), a Byzantine of noble birth, a teacher of rhetoric and philosophy at Constantinople, and the most accomplished Greek scholar of his age, had arrived in Venice as an envoy from the Eastern Emperor. Florentine scholars visited him, and on his return accompanied him to Constantinople to learn Greek. In 1396 Chrysoloras was invited by Florence to accept an appointment, in the university there, to the first chair of Greek letters in the West, and accepted. From 1396 to 1400 he taught Greek in the rich and stately city of Florence, at that time the intellectual and artistic center of Christendom. From his visit dates the enthusiasm for the study of Greek in the West.

Other Greek scholars arrive in Italy. Chrysoloras returned to Constantinople for a time, in 1403, and Guarino of Verona, who had been one of his pupils, accompanied him and spent five years there as a member of his household. When he returned to Italy he brought with him about fifty manuscripts, and before his death he had translated a number of them into Latin. He also prepared a Greek grammar which superseded that of Chrysoloras. In 1412 he was elected to the chair at Florence formerly held by Chrysoloras, and later he established an important school at Ferrara, based largely on instruction in the Latin and Greek classics, which will be referred to again in the next chapter.

A number of other learned Greeks had reached Italy prior to the fall of Constantinople (1453) before the advancing Turks, and after its fall many more sought there a new home. Many of these found, on landing, that their knowledge of Greek and the possession of a few Greek books were an open sesame to the learned circles of Italy.

Enthusiasm for the new movement; libraries and academies founded. The enthusiasm for the recovery and restoration of ancient literature and history which this work awakened among the younger scholars of Italy can be imagined. While most of the professors in the universities and most of the church officials at first had nothing to do with the new movement, being wedded to scholastic methods of thinking, the leaders of the new learning drew about them many of the brightest and most energetic of the young men who came to those universities which were hospitable to the new movement. Greek scholars in the university towns were followed by admiring bands of younger students, who soon took up the work and superseded their masters. Academies, named after the one conducted by Plato in the groves near Athens, whose purpose was to promote literary studies, were founded in all the important Italian cities (**R. 129**). The members usually Latinized their names, and celebrated the ancient festivals. It was the curious and enthusiastic Italians who, more than the Greek scholars who taught them the language, opened up the literature and history of Athens to the comprehension of the western world.

The financial support of the movement came from the wealthy *merchant princes,* reigning dukes, and a few church authorities.

who assisted scholars and spent money most liberally in collecting manuscripts and accumulating books. Cosimo de' Medici (1393–1464), a banker and ruler of Florence, spent great sums in collecting and copying manuscripts. Vespasiano, a fifteenth-century bookseller of Florence, has left us an interesting picture of the work of Cosimo in founding (1444) the great Medicean library at Florence (**R. 130**) and of the difficulties of book collecting in the days before the invention of printing. Under Cosimo's grandson, Lorenzo the Magnificent, who died in 1492, two expeditions were sent to Greece to obtain manuscripts for the Florentine *library. Vespasiano* also describes for us the books collected

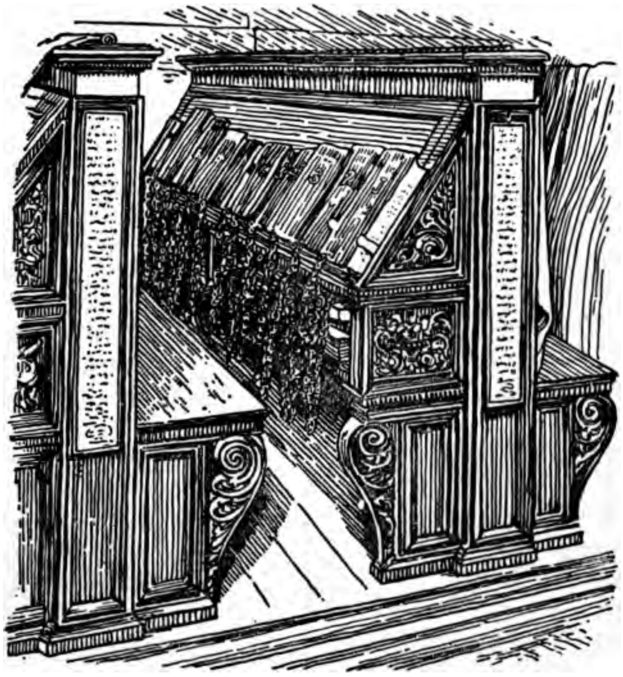

Fig. 28. Bookcase and Desk in the Medicean Library at Florence

(Drawn from a photograph)

This library was founded in 1444. It contains to-day about 10,000 Greek and Latin manuscripts, many of them very rare, and of a few the only copies known. The building was designed by Michael Angelo, and its construction was begun in 1525. The bookcases are of about this date. It shows the early method of chaining books to the shelves, and cataloguing the volumes on the end of each stack.

(c. 1475–80) for the great ducal library at Urbino (**R. 131**), the greatest library in the Christian world at the time of its completion, and the work of Pope Nicholas V (1447–1455) in laying the foundations (1450) for the great Vatican Library at Rome (**R. 132**).

The revival aided by the invention of paper and printing. Very fortunately for the spread of the new learning an important process and a great invention now came in at a most opportune time. The process was the manufacture of paper; the invention that of printing.

The manufacture of paper is probably a Chinese invention, early obtained by the Arabs. During the Mohammedan occupation of Spain paper mills were set up there, and a small supply of their paper found its way across the Pyrenees. The Christians who drove the Mohammedans out lost the process, and it now came back once more from the East. By about 1250 the Greeks had obtained the process from Mohammedan sources, and in 1276 the first paper mill was set up in Italy. In 1340 a paper factory was established at Padua, and soon thereafter other factories began to make paper at Florence, Bologna, Milan, and Venice. In 1320 a paper factory was established at Mainz, in Germany, and in 1390 another at Nuremberg. By 1450 paper was in common use and the way was now open for one of the world's greatest inventions.

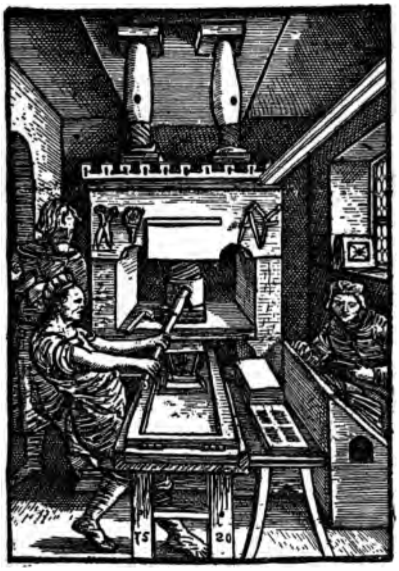

FIG. 29. AN EARLY SIXTEENTH-CENTURY PRESS

"The prynters haue founde a crafte to make bokis by brasen letters sette in ordre by a frame." An engraving, dated 1520. The man at the right is setting type, and the one at the lever is making an impression. A number of four-page printed sheets are seen on the table at the right of the press.

This was the invention of printing. From the difficulty experienced in securing books for the great libraries at Florence, Urbino, and Rome, as we have seen (**Rs. 130, 131, 132**), and the great cost of reproducing single copies of books, we can see that the work of the humanists of the fourteenth and fifteenth centuries in Italy probably would have had but little influence elsewhere but for the invention of printing. To disseminate a new learning involving two great literatures by copying books, one at a time by hand, would have prevented instruction in the new subjects becoming general for centuries, and would have materially retarded the progress of the world. The discovery of the art of printing, coming when it did, scattered the new learning over Europe.

The enormous importance of this new invention which could be used to print rapidly a thousand or more copies of a book, all exactly alike and free from copyist errors, can be appreciated. It tremendously cheapened books, made the general use of the textbook method of teaching possible, and paved the way for a great extension of schools and learning (**R.** 134). From now on the press became a formidable rival to the pulpit and the sermon, and one of the greatest of instruments for human progress and individual liberty. From this time on educational progress was to be much more rapid than it had been in the past. From an educational point of view the invention of printing might almost be taken as marking the close of the mediæval and the beginning of modern times.

Rise of geographical discovery. The new influences awakened by the Revival of Learning found expression in other directions.

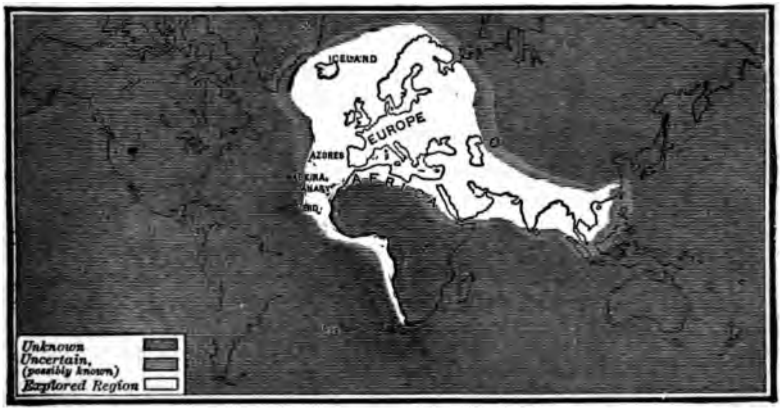

FIG. 30. THE WORLD AS KNOWN TO CHRISTIAN EUROPE BEFORE COLUMBUS

One of these was geographical discovery, itself an outgrowth of that series of movements known as the *Crusades*, with the accompanying *revival of trade* and commerce. These led to travel, exploration, and discovery. By the latter part of the thirteenth century the most extensive travel which had taken place since the days of ancient Rome had begun, and in the next two and a half centuries a great expansion of the known world took place. Marco Polo and Sir John Mandeville made extended travels to the Orient, and returning (Polo returned, 1295) described to a wondering Europe the new lands and peoples they had seen. The *Voyages* of Polo and the *Travels* of Mandeville were widely read. By the beginning of the fourteenth century the compass had been perfected, in Naples, and a great era of exploration had been begun. In 1402 venturesome sailors, out beyond the "Pillars of Hercules," discovered the Canary Islands; in 1419 the Madeira Islands were reached; in 1460 the Cape Verde Islands were found; and in 1497 Vasco da Gama rounded the southern tip of Africa and discovered the long-hoped-for sea route to India. Five years later, sailing westward with the same end in view, Columbus discovered the American continent. Finally, in 1519–22, Magellan's ships circumnavigated the globe, and, returning safely to Spain, proved that the world was round. In 1507 Waldenseemüller published his *Introduction to Geography*, a book that was widely read, and one which laid the foundations of this modern study.

The effect of these discoveries in broadening the minds of men can be imagined. The religious theories and teachings of the Middle Ages as to the world were in large part upset. New races and new peoples had been found, a round earth instead of a flat one had been proved to exist, new continents had been discovered, and new worlds were now ready to be opened up for scientific exploration and colonization.

About 1500 a stimulating time. The latter part of the fifteenth century and the earlier part of the sixteenth was a stimulating period in the intellectual development of Christian Europe. The Turks had closed in on Constantinople (1453) and ended the Eastern Empire, and many Greek scholars had fled to the West. Though the Revival of Learning had culminated in Italy, its influence was still strongly felt in such cities as Florence and Venice, while in German lands and in England the reform movement awakened by it was at its height. Greek and Hebrew were now taught generally in the northern universities. Everywhere the old scholastic learning and methods were being overturned by *the new humanism*, and scholastic teachers were being displaced from their positions in the universities and schools. The new humanistic university at Wittenberg, founded in 1502, was exerting large influence among German scholars and attracting to it the brightest young minds in German lands. Erasmus was the greatest international scholar of the age, though ably seconded by distinguished humanistic scholars in Italy, France, England, the Low Countries, and German lands. The court schools of Italy (**R. 135**) and the municipal colleges of France (**R. 136**) were marking out new lines in the education of the select few. Colet was founding his reformed grammar school (1510) at Saint Paul's, in London (**R. 138**), the first of a long line of English humanistic grammar schools. Leonardo da Vinci, Raphael, and Michael Angelo were adding new fame to Italy, and carrying the Renaissance movement over into that art which the world has ever since treasured and admired.

The Italian cities, particularly Genoa and Venice, had become rich from their commerce, as had many cities in northern lands. Everywhere the cities were centers for the new life in western Christendom. England was rapidly changing from an agricultural to a manufacturing nation. The serf was evolving into a free man all over western Europe. Italian navigators had discovered new sea routes and lands, and robbed the ocean of its terrors. Columbus had discovered a new world, soon to be peopled and to become the home of a new civilization. Magellan had shown that the world was round and poised in space, instead of flat and surrounded by a circumfluent ocean. The printing-press had been perfected and scattered over Europe, and was rapidly multiplying books and creating a new desire to read (**R. 134**). The Church was more tolerant of new ideas than it had been in the past, or soon was to be for centuries to come. All of these new influences and conditions combined to awaken thought as had not happened before since the days of ancient Rome. The world seemed about ready for rapid advances in many new directions, and great progress in learning, education, government, art, commerce, and invention seemed almost within grasp. Unfortunately the promise was not to be fulfilled, and the progress that seemed possible in 1500 was soon lost amid the bitterness and hatreds engendered by a great religious conflict, then about to break, and which was destined to leave, for centuries to come, a legacy of intolerance and suspicion in all lands.

QUESTIONS FOR DISCUSSION

1. In what way was the fact that Dante wrote his *Divine Comedy* in Italian instead of Latin an evidence of large independence?
2. Was it a good thing for peace and civilization that the modern languages arose, instead of all speaking and writing Latin? Why?
3. Of what value to one is a "sense of the past behind him, and a conception of the possibilities of the future before him," by way of giving perspective and self-confidence? Do we have many mediæval-type people to-day?
4. Show how the work of Petrarch required a man with a strong historic sense.
5. Show the awakening of the modern scientific spirit in the critical and reconstructive work of the scholars of the Revival.
6. Contrast the modern and the mediæval spirit as related to learning.
7. Suppose that we should unexpectedly unearth in Mexico a vast literature of a very learned and scholarly people who once inhabited the United States, and should discover a key by which to read it. Would the interest awakened be comparable with that awakened by the revival of Greek in Italy? Why?
8. What does the fact that no copy of Quintilian's *Institutes*, a very famous Roman book, was known in Europe before 1416 indicate as to the destruction of books during the early Christian period?
9. What does the fact that the Christians knew little about Greek literature or scholarship for centuries, and that the awakening was in large part brought about by the pressure of the Turks on the Eastern Empire, indicate as to intercourse among Mediterranean peoples during the Middle Ages?
10. How do you explain the fact that the recovery of the ancient learning was very largely the work of young men, and that older professors in the universities frequently held aloof from any connection with the movement?
11. Compare the financial support of the Revival in Italy with the support of universities and of scientific undertakings in America during recent times.
12. Explain the long-delayed interest in the Revival in the northern countries.
13. Trace the larger steps in the transference of Greek literature and learning from Athens, in the fifth century B.C., to its arrival at Harvard, in Massachusetts, in 1636.
14. What was the importance of the rediscovery of Hebrew?
15. Show how the invention of printing was a revolutionary force of the first magnitude.
16. Why should a license from the Church have been necessary to print a book? Have we any remaining vestiges of this church control over books?
17. Do you see any special reason why Venice should have become the early center of the book trade?
18. Show how the printing-press became "a formidable rival to the pulpit and the sermon, and one of the greatest instruments for human progress and liberty."
19. One writer has characterized the Revival of Learning as the beginnings of the emergence of the individual from institutional control, and the substitution of the humanities for the divinities as the basis of education. Is this a good characterization of a phase of the movement?

SELECTED READINGS

In the accompanying *Book of Readings* the following selections are reproduced:

125. Petrarch: On copying a Work of Cicero.
126. Benvenuto: Boccaccio's Visit to the Library at Monte Cassino.
127. Symonds: Finding of Quintilian's *Institutes* at Saint Gall.
  (*a*) Letter of Poggio Bracciolini on the "Find."
  (*b*) Reply of Lionardo Bruni.
128. MS.: Reproducing Books before the Days of Printing.
129. Symonds: Italian Societies for studying the Classics.
130. Vespasiano: Founding of the Medicean Library at Florence.
131. Vespasiano: Founding of the Ducal Library at Urbino.
132. Vespasiano: Founding of the Vatican Library at Rome.
133. Green: The New Learning at Oxford.
134. Green: The New Taste for Books.

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CHAPTER XI

EDUCATIONAL RESULTS OF THE REVIVAL OF LEARNING

Significance of the Revival of Learning. The important and outstanding educational result of the revival of ancient learning by Italian scholars was that it laid a basis for a new type of education below that of the university, destined in time to be much more widely opened to promising youths than the old cathedral and monastic schools had been. This new education, based on the great intellectual inheritance recovered from the ancient world by a relatively small number of Italian scholars, dominated the secondary-school training of the middle and higher classes of society for the next four hundred years. It clearly began by 1450, it clearly controlled secondary education until at least after 1850. Out of the efforts of Italian scholars to resurrect, reconstruct, understand, and utilize in education the fruits of their legacy from the ancient Greek and Roman world, arose modern secondary education, as contrasted with mediæval church education.

Mediæval education, after all, was narrowly technical. It prepared for but one profession, and one type of service. There was little that was liberal, cultural, or humanitarian about it. It prepared for the world to come, not for the world men live in here. The new education developed in Italy aimed to prepare directly for life in the world here, and for useful and enjoyable life at that. Combining with the new humanistic (cultural) studies the best ideals and practices of the old chivalric education — physical training, manners and courtesy, reverence — the Italian pioneers devised a scheme of education, below that of the universities, which they claimed prepared youths not only for an intellectual appreciation of the great and wonderful past of which they were descendants, but also for intelligent service in the two great non-church occupations of Italy in the fifteenth century — public service for the City-State, and commerce and a business life. This new type of education spread to other lands, and a new type of secondary-school training, actuated by a new and a modern purpose, thus came out of the revival of learning in Italy.

***New schools* created.** The "finds" began with Petrarch's discovery of two orations of Cicero, in 1333, and by the time "the century of finds" (1333–1433) was drawing to a close the materials for a new type of secondary education had been accumulated. Not only was the old literature discovered and edited, but the finding of a complete copy of Quintilian's *Institutes of Oratory* at Saint Gall (**R. 127**), in 1416, gave a detailed explanation of the old Roman theory of education at its best. A number of "court schools" now arose in the different cities, to which children from the nobility and the banking and merchant classes were sent to enjoy the advantages they offered over the older types of religious schools.

Two of the most famous teachers in these court schools were Vittorino da Feltre, who conducted a famous school at Mantua from 1423 to 1446, and Guarino da Verona, who conducted another almost equally famous school at Ferrara from 1429 to 1460. Taking boys at nine or ten and retaining them until twenty or twenty-one, their schools were much like the best private boarding-schools of England and America to-day. Drawing to them a selected class of students; emphasizing physical activities, manners, and morals; employing good teaching processes; and providing the best instruction the world had up to that time known — the influence of these court schools was indeed large. Many of the most distinguished leaders in Church and State and some of the best scholars of the time were trained in them. By better methods they covered, in shorter time, as much or more than was provided in the Arts course of the universities, and so became rivals of them. The ultimate result was that the Arts courses in the universities were advanced to a much higher plane.

The humanistic course of study. The new instruction was based on the study of Greek and Latin, combined with the courtly ideal and with some of the physical activities of the old chivalric education. Latin was begun with the first year in school, and the regular Roman emphasis was placed on articulation and proper accent. After some facility in the language had been gained, easy readings, selected from the greatest Roman writers, were attempted. As progress was made in reading and writing and speaking Latin as a living language, Cicero and Quintilian among prose writers, and Vergil, Lucan, Horace, Seneca, and Claudian among the poets, were read and studied. History was introduced in these schools for the first time and as a new subject of study, though the history was the history of Greece and Rome and was drawn *from the authors* studied. Livy and Plutarch were the chief historical writers used. Nothing that happened after the fall of Rome was deemed as of importance. Much emphasis was placed on manners, morality, and reverence, with Livy and Plutarch again as the great guides to conduct. Throughout all this the use of Latin as a living language was insisted upon; declamation became a fine art; and the ability to read, speak, and compose in Latin was the test. Cicero, in particular, because of the exquisite quality of his Latin style, became the great prose model. Quintilian was the supreme authority on the purpose and method of teaching (**R. 25**). Greek also was begun later, though studied much less extensively and thoroughly. The Greek grammar of Theodorus Gaza was studied, followed by the reading of Xenophon, Isocrates, Plutarch, and some of Homer and Hesiod.

This thorough drill in ancient history and literature was given along with careful attention to manners and moral training, and each pupil's health was watchfully supervised — an absolutely new thought in the Christian world. Such physical sports and games as fencing, wrestling, playing ball, football, running, leaping, and dancing were also given special emphasis. Competitive games between different schools were held, much as in modern times. The result was an all-round physical, mental, and moral training, vastly superior to anything previously offered by the cathedral and other church schools, and which at once established a new type which was widely copied.

Humanism in France. From Italy the new humanism was carried to France, along with the retreating armies that had occupied Naples, Florence, and Milan, and when Francis I came to the French throne, in 1515, the new learning found in him a willing patron.

A royal press was set up in Paris, in 1526, to promote the introduction of the new learning. Libraries were built up, as in Italy. Humanist scholars were made secretaries and ambassadors. The *Collège de France* was established at Paris, by direction of the King, with chairs in Latin, Greek, Hebrew, and mathematics. To Hebrew the Italians had given almost no attention, but in France, and particularly in Germany, Hebrew became an important study. The development of schools in northern France was hindered by the dissensions following the religious revolts of Luther and Calvin, but in southern France many of the cities founded municipal colleges, much like the court schools of northern *Italy in type.* The work of the city of Bordeaux in reorganizing its town school along the new lines was typical of the work of other southern cities. Good teachers, liberal instruction, and a broad-minded attitude on the part of the governing authorities made this school, known as the *Collège de Guyenne,* notable not only for humanistic instruction, but for intelligent public education during the second half of the sixteenth century. The picture of this college (school) left us by its greatest principal, Elie Vinet (R. 136), gives an interesting description of its work.

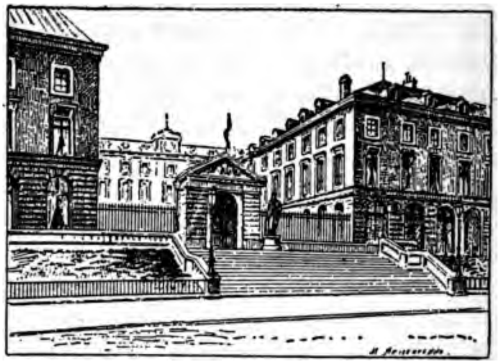

FIG. 31. COLLÈGE DE FRANCE
Founded at Paris, in 1530, by King Francis I, for instruction in the new humanistic learning

Humanism in Germany. The French language and life was closely related to that of northern Italy, and French religious thought had always been so closely in touch with that of Rome that something of the Italian feeling for the old Roman culture and institutions was felt by the humanists of France. In Germany and England no such feeling existed, and in these countries any effort to discredit the rising native languages was much more likely to be regarded as mere pedantry. In both these countries, though, Latin was still the language of the Church, of the universities, of all learned writing, and the means of international intercourse, and after the new humanism had once obtained a foothold it was welcomed by scholars as a great addition to existing knowledge.

The enthusiasm of the humanists for the new learning led them to urge the establishment of humanistic secondary schools in the German cities. As in Italy, the commercial cities were the first to provide schools of the new type. In 1526 the commercial city of Nuremberg, in southern Germany, opened one of the first of the new city humanistic secondary schools, Melanchthon being present and giving the dedicatory address. A number of similar schools were founded about this time in various German cities —Ilfeld, Frankfort, Strassburg, Hamburg, Bremen, Dantzig —*among the number.* Many of these failed, as did the one at

Nuremberg, to meet the needs of the people in essentially commercial cities. Whatever might have been true in more cultured Italy, in German cities a rigidly classical training for youth and early manhood was found but poorly suited to the needs of the sons of wealthy burghers destined to a commercial career. The rising commerce of the world apparently was to rest on native languages, and not on elegant Latin verse and prose. The commercial classes soon fell back on burgher schools, elementary vernacular schools, writing and reckoning schools, business experience, and travel for the education of their sons, leaving the Latin schools of the humanists to those destined for the service of the Church, the law, teaching, or the higher state service.

The Work of Johann Sturm. The most successful classical school in all Germany, and the one which formed the pattern for future classical creations, was the *gymnasium* at Strassburg, under the direction (1536–82) of the famous Johann Sturm, or Sturmius, as he came to call himself. This was one of the early classical schools founded by the commercial cities, but it had not been successful. In 1536 the authorities invited Sturm, a graduate of the University of Louvain, and at that time a teacher of classics and dialectic at Paris, where he had come in contact with the humanism brought from Italy, to become head of the school and reorganize it. This he did, and during the forty-five years he was head of the school it became the most famous classical school in continental Europe His *Plan of Organization*, published in 1538; his *Letters to the Masters* on the course of study, in 1565; and the record of an examination of each class in the school, conducted in 1578, all of which have been preserved, give us a good idea as to the nature of the organization and instruction (**R. 137**).

FIG. 32. JOHANN STURM (1507–89)
(After a contemporary engraving by Stofflin)

Sturm was a strong and masterful man, with a genius for organization. Probably adopting the plan of the French colleges (R. 136), he organized his school into ten classes, one for each year the pupil was to spend in the school, and placed a teacher in charge of each. The aim and end of education, as he stated it, was "piety, knowledge, and the art of speaking," and "every effort of teachers and pupils" should bend toward acquiring "knowledge, and purity and elegance of diction." Of the ten years the pupil was to spend in the *gymnasium*, seven were to be spent in acquiring a thorough mastery of pure idiomatic Latin, and the three remaining years to the acquisition of an elegant Ciceronian style. The instruction in both Latin and Greek was much like that of the court schools of Italy, except that in Greek the New Testament was read in addition. The plays and games and physical training of the Italian schools, however, were omitted; much less emphasis was placed on manners and gentlemanly conduct; and in educational purpose a narrow drill was substituted for the broad cultural spirit of the French and Italian schools.

Colet and Saint Paul's School. The first real establishment of the new learning in England came through the secondary schools, and through the refounding of the cathedral school of Saint Paul's, in London, by the humanist John Colet, in 1510. Colet had become Dean of Saint Paul's Church, and Erasmus urged him to embrace the opportunity to reconstruct the school along humanistic lines. This he did, endowing it with all his wealth, and in a series of carefully drawn-up Statutes (R. 138), which were widely copied in subsequent foundations, Colet laid special emphasis on the school giving training in the new learning and in Christian discipline. Erasmus gave much of his time for years to finding teachers and writing textbooks for the school. William Lily (1468–1522), another early humanist recently returned from study in Italy, and the author of a widely known and much used textbook — *Lily's Latin Grammar* (R. 140) — was made headmaster of the school.

The course of study was of the humanistic type already described, coupled with careful religious instruction. In place of the monkish Latin pure Latin and Greek were to be taught, and the best classical authors took the place of the old mediæval disciplines. The school met with much opposition, was denounced as a temple of idolatry and heathenism by the men of the old schools, and even the Bishop of London tried twice to convict *Colet of heresy and* suppress the instruction. Notwithstanding this the school became famous for its work, not only in London but throughout England. From its desks came a long line of capable statesmen, learned clergy, brilliant scholars, and literary men.

Influence on other English grammar schools. In a preceding chapter (p. 148) we mentioned the founding of many English grammar schools after 1200. At the time Saint Paul's School was refounded there were something like three hundred of these, of all classes, in England. They existed in connection with the old monasteries, cathedrals, collegiate churches, guilds, and charity foundations in connection with parish churches, while a few were due to private benevolence and had been founded independently of either Church or State. The Sevenoaks Grammar School, founded by the will of William Sevenoaks, in 1432 (**R. 141**), and for which he stated in his will that he desired as master "an honest man, sufficiently advanced and expert in the science of Grammar, B.A., by no means in holy orders," and the chantry grammar school founded by John Percyvall, in 1503 (**R. 142**), are examples of the parish type. The famous Winchester Public School, founded by Bishop William of Wykeham, in 1382, to emphasize grammar, religion, and manners, and to prepare seventy scholars for New College, at Oxford, where they were to be trained as priests; and Eton College, founded by Henry VI, in 1440, to prepare students for King's College, at Cambridge, are examples of the larger private foundations. A few, such as the grammar school at Sandwich (1579), owed their origin (**R. 143**) to the initiative of the city authorities. Most of these grammar schools were small, but a few were large and wealthy establishments.

These old foundations, with their mediæval curriculum, after a time began to feel the influence of Colet's school. Within a century, due to one influence or another, practically all had been remodeled after the new classical type set up by Colet. In the course of study given for Eton (**R. 144**), for 1560, we see the new learning fully established, and in the course of study for a small country grammar school, in 1635 (**R. 145**), we see how fully the new learning, with its emphasis on Latin as a living language, had by this time extended to even the smallest of the English grammar schools. The new foundations, after 1510, were almost entirely *new-learning* grammar schools, with large emphasis on grammar, *good Latin and Greek*, games and sports, and the religious spirit.

The reaction against mediævalism. Having traced the introduction of the new learning by countries, it still remains to point out certain significant educational features of the movement which were common in all lands, and which profoundly modified subsequent educational practice. Both the purpose and the method of education were permanently changed.

Up to about the middle of the fourth Christian century the aim of both Greek and Roman education had been to prepare men to become good and useful citizens in the State. Then the Church gained control of education, and for a thousand years the chief object was to prepare for the world to come. Success and good citizenship in this world counted for little, religious devotion took the place of the old state patriotism, the salvation of souls took the place of the promotion of the social welfare, and the aim and end of life here was to attain everlasting bliss in the world to come. To be able to appease the dread Judge at the Day of Judgment, prayer, penance, and holy contemplation were the important things here below. It was preëminently the age of the self-abasing monk, and this mental attitude dominated all thinking and learning.

The spirit behind the Revival of Learning was a protest against this mediæval attitude, and the protest was vigorous and successful. The Revival of Learning was a clear break with mediæval traditions and with mediæval authority. It restored to the world the ideals of earlier education — self-culture, and preparation for usefulness and success in the world here. In Italy, France, Germany, and England the movement, too, met with the most thorough approval from modern men — merchants, court officials, and scholars who were ready to break with the mediæval type of thinking. The court and other types of secondary schools now established were popular with the higher classes in society, and this aristocratic stamp the humanistic schools and courses have ever since retained. These schools restored to the world the practical education of the days of Cicero, and preparation for intelligent service in the Church, State, and the larger business life became one of their important purposes. Supported as they were by the ruling classes, the new schools were close to the most progressive forces in the national life of the different countries. They represented an unmistakable reaction against the world of the mediæval monk and the Scholastic, and their early success was in *large part because of this.*

The schools become formal. After the new learning had obtained a firm footing in the schools there happened what has often happened in the history of new educational efforts — that is, the new learning became narrow, formal, and fixed, and lost the liberal spirit which actuated its earlier promoters. In the beginning the Italian humanists had aimed at large personal self-culture and individual development, and the northern humanists at moral and religious reform and preparation for useful service, both using the classics as a means to these new ends. After about 1500 in Italy, and 1600 in the northern countries, when the new-learning schools had become well established and thoroughly organized, the tendency arose to make the means an end in itself. Instead of using the classical literatures to impart a liberal education, give larger vision, and prepare for useful public service, they came to be used largely for disciplinary ends. The teaching of Campion at Prague (1574) well illustrates this degeneracy (**R. 146**).

In consequence the aim of the new humanistic education came in time to be thought of in terms of languages and literatures, instead of in terms of usefulness as a preparation for intelligent living, and educational effort was transferred from the larger human point of view of the early humanistic teachers to the narrower and much less important one of mastering Greek and Latin, writing verses, and cultivating a good (Ciceronian) Latin style. As a result of this change in aim and purpose, classical education gradually became narrow and formal, and drill in composition and declamation and imitation of the style of ancient authors — particularly Cicero, whence the term "Ciceronianism" which came to be applied to it — grew to be the ruling motives in instruction. By the end of the sixteenth century this change had taken place in both the secondary schools and the universities, and this narrow linguistic attitude continued to dominate classical education, in German lands until the mid-eighteenth, and in all other western European countries and in America until near the middle of the nineteenth, century.

QUESTIONS FOR DISCUSSION

1. Explain just what is meant by the statement that mediæval education was narrowly technical.
2. State the educational ideals of the new secondary schools evolved by the Italian humanistic scholars, and show whether these ideals have been best embodied in the German *gymnasium* or the English grammar school.
3. How do you explain the merchants and bankers and princes of Italy

being more interested in the revival-of-learning movement than the Church and university scholars? Do such classes to-day show the same type of interest in aiding learning?

4. What was the particular importance of the recovery of Quintilian's *Institutes?* Of Cicero's *Orations* and *Letters?*
5. Show how the type of education developed in the Italian court schools was superior to that of the best of the cathedral schools. To that developed by Sturm.
6. Show how the new type of secondary schools was naturally associated with court and nobility and men of large worldly affairs, and how in consequence the new secondary education became and for long continued to be considered as aristocratic education.
7. Had the purified Latin been restored, as the general international language of learning and government, would it have helped materially in bringing about the civilizing influences Erasmus saw in it?
8. Has the development of separate nationalities and different national languages aided in advancing international peace and civilization? Why?
9. Why should the new humanistic studies have developed religious fervor in Germany and England, in place of the patriotic fervor of the Italian scholars?
10. Contrast the aim of Sturm's school with that of the Italian court schools, and the English grammar schools. Point out the new tendencies in his work.
11. Show how it was natural that the first American school should have been a Latin grammar school in type.
12. Show that the new conception as to education, as expressed by the new humanism, found a public ready to support it. What was the nature of this public?
13. Show how the new schools were "close to the most progressive forces in the national life," and the influence of this, particularly in England and America, in fixing classical training as the approved type of secondary education.
14. Explain how the written theme of to-day is the successor of the mediæval disputation.
15. Show how the methods of instruction employed in the new Latin grammar schools have been passed over to the native-language schools.
16. Show how instruction in Latin, by being changed from cultural to disciplinary ends, made French the language of diplomacy and society, tended to elevate all the vernacular tongues, and marked the beginnings of the end of the importance of Latin as a school study except for the purposes of the Roman Catholic Church.
17. Does it require a higher quality of teaching to impart the cultural aspect of a study than is required for the disciplinary?

SELECTED READINGS

In the accompanying *Book of Readings* the following selections are reproduced:

135. Guarino: On Teaching the Classical Authors.
136. Vinet: The Collège de Guyenne at Bordeaux.
137. Sturm: Course of Study at Strassburg.
138. Colet: Statutes for St. Paul's School, London.
    (a) Religious Observances.

(*b*) Admission of Children.
(*c*) The Course of Study.

139. Ascham: On Queen Elizabeth's Learning.
140. Colet: Introduction to Lily's Latin Grammar.
141. William Sevenoaks: Foundation Bequest for Sevenoaks Grammar School.
142. John Percyvall: Foundation Bequest for a Chantry Grammar School.
143. Sandwich: A City Grammar School Foundation.
144. Eton: Course of Study in 1560.
145. Martindale: Course of Study in an English Country Grammar School.
146. Simpson: Degeneracy of Classical Instruction.

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*Lupton, J. H. *A Life of John Colet.*
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*Thurber, C. H. "Vittorino da Feltre"; in *School Review*, vol. 7, pp. 295–300.
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*Woodward, W. H. *Vittorino da Feltre, and other Humanistic Educators.*
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CHAPTER XII

THE REVOLT AGAINST AUTHORITY

The new questioning attitude. The student can hardly have followed the history of educational development thus far without realizing that a serious questioning of the practices and of the dogmatic and repressive attitude of the omnipresent mediæval Church was certain to come, sooner or later, unless the Church itself realized that the mediæval conditions which once demanded such an attitude were rapidly passing away, and that the new life in Christendom now called for a progressive stand in religious matters as in other affairs. The new life resulting from the Crusades, the rise of commerce and industry, the organization of city governments, the rise of lawyer and merchant classes, the formation of new national States, the rise of a new "Estate" of tradesmen and workers, the new knowledge, the evolution of the university organizations, and the discovery of the art of printing — all these forces had united to develop a new attitude toward the old problems and to prepare western Europe for a rapid evolution out of the mediæval conditions which had for so long dominated all action and thinking. This the Church should have realized, and it should have assumed toward the progressive tendencies of the time the same intelligent attitude assumed earlier toward the rise of scholastic inquiry. But it did not, and by the fifteenth century the situation had been further aggravated by a marked decline in morality on the part of both monks and clergy, which awakened deep and general criticism in all lands, but particularly among the northern peoples.

The Revival of Learning was the first clear break with mediævalism. In the critical and constructive attitude developed by the scholars of the movement, their renunciation of the old forms of thinking, the new craving for truth for its own sake which they everywhere awakened, and their continual appeal to the original sources of knowledge for guidance, we have the definite beginnings of a modern scientific spirit which was destined ultimately to question all things, and in time to usher in modern conceptions and modern ways of thinking. The authority of the mediæval *Church would be questioned*, and out of this questioning would come in time a religious freedom and a religious tolerance unknown in the mediæval world. The great world of scientific truth would be inquired into and the facts of modern science established, regardless of what preconceived ideas, popular or religious, might be upset thereby. The divine right of kings to rule, and to dispose of the fortunes and happiness of their peoples as they saw fit, was also destined to be questioned, and another new "Estate" would in time arise and substitute, instead, in all progressive lands, the divine right of the common people. Religious freedom and toleration, scientific inquiry and scholarship, and the ultimate rise of democracy were all involved in the critical, questioning, and constructive attitude of the humanistic scholars of the Renaissance. These came historically in the order just stated, and in this order we shall consider them.

Humanism became a religious reform movement in the North. In Italy the Revival of Learning was classical and scientific in its methods and results, and awakened little or no tendency toward religious and moral reform. Instead it resulted in something of a paganization of religion, with the result that the Papacy and the Italian Church probably reached their lowest religious levels at about the time the great religious agitation took place in northern lands. In the latter, on the contrary, the introduction of humanism awakened a new religious zeal, and religious reform and classical learning there came to be associated almost as one movement. In England, Germany, the Low Countries, and in large parts of northern France, the new learning was at once directed to religious and moral ends. The patriotic emotions roused in the Italians by the humanistic movement were in the northern countries superseded by religious and moral emotions, and the constant appeal to sources turned the northern leaders almost at once back to the Church Fathers and the original Greek and Hebrew Testaments for authority in religious matters.

Evolution or revolution. The reaction against the mediæval dogmas of the Church and the demand by the humanists of the North for a return to the simpler religion of Christ gradually grew, and in time became more and more insistent. This demand was not something which broke out all at once and with Luther, as many seem to think. Had this been so he would soon have been suppressed, and little more would have been heard of him. Instead, the literature of the time clearly reveals that there had been, for two centuries, an increasing criticism of the Church, and a number of local and unsuccessful efforts at reform had been attempted. The demand for reform was general, and of long standing, outside of Italy and southern France. Had it been heeded probably much subsequent history might have been different.

In 1414 a Council of the Church was called at Constance, in Switzerland, to heal the papal schism, and this Council made a serious attempt at church reform. After reuniting the Church under one Pope, it drew up a list of abuses which it ordered remedied (**R. 149**). It also attempted to establish a democratic form of organization for the government of the Church, with Church Councils meeting from time to time to advise with the Pope and formulate church policy, much like the government of a modern parliament and king. Had this succeeded, much future history might have been different and the civilization of the world to-day much advanced. But the attempt failed, and the absolutism of the reunited Papacy became stronger than ever before. Protests of princes, actions of legislative assemblies, protests sometimes of bishops, the failing allegiance of men of affairs, the increasing condemnation and ridicule from laymen and scholars — all signs of a strong undercurrent of public opinion — seemed to have no effect on those responsible for the policy of the Church.

That the different rebellions and refusals of reform helped directly to the ultimate break of Luther is not probable, as Luther seems to have worked out his position by himself. Each of these earlier defiances of authority and the later defiance of Luther were alike, though, in two respects. Each demanded a return to the usages and beliefs and practices of the earlier Christian Church, as derived from a study of the Bible and of the writings of the early Christian Fathers; and each insisted that Christians should be permitted to study the Bible for themselves, and reach their own conclusions as to Christian duty. In this demand to be allowed to go back to the original sources for authority, and the assertion of the right to personal investigation and conclusions, we see the new intellectual standards established by the Revival of Learning in full force. After 1500 the rising demands for moral reform and the recognition of individual judgment could not be put aside much longer. Unless there could be evolution there would be revolution. Evolution was refused, and revolution was the result.

Discontent in German lands. It happened that the first revolt *to be successful in a large* way broke out in Germany, and about the person of an Augustinian monk and Professor of Theology in the University of Wittenberg by the name of Martin Luther (1483–1546). Had it not centered about Luther the revolt would have come about some one else; had it not come in Germany it would have come in some other land. It was the modern scientific spirit of inquiry and reason in conflict with the mediæval spirit of dogmatic authority, and two such forces are sooner or later destined to clash. Whether we be Catholic or Protestant, and whether we approve or disapprove of what Luther did or of his methods, makes little difference in this study. Over a question involving so much religious partisanship we do not need to take sides. All that we need concern ourselves with is that a certain Martin Luther lived, did certain things, made certain stands for what he believed to be right, and what he did, whether right or wrong, whether beneficial to progress and civilization or not, stands as a great historical fact with which the student of the history of education must take account. That the same or even better results might have been arrived at in time by other methods may be true, but what we are concerned with is the course which history actually took.

There were special reasons why the trouble, when once it broke, made such rapid headway in German lands. The Germans had a long-standing grudge against the Italian papal court, chiefly because it had for long been draining Germany of money to support the Italian Church. In fact it may be said that the whole German people, from the princes down to the peasants, felt themselves unjustly treated, that the German money which flowed to Rome should be kept at home, and that the immoral and inefficient clergy should be replaced by upright, earnest men who would attend better to their religious duties (**R. 150**). It was these conditions which prepared the Germans for revolt, and enabled Luther to rally so many of the princes and people to his side when once he had defied authority.

The German revolt. The crisis came over the sale of indulgences for sins by the papal agent, Tetzel, who began the practice in the neighborhood of Wittenberg, where Luther was a Professor of Theology, in 1516. There is little doubt but that Tetzel, in his zeal to raise money for the rebuilding of the church of Saint Peter's at Rome, a great undertaking then under way, exceeded his instructions and made claims as to the nature and efficacy of indulgences which were not warranted by church doctrines.

Such would be only human. The sale, however, irritated Luther, and he appealed to the Archbishop of Magdeburg to prohibit it. Failing to obtain any satisfaction, he followed the old university custom, made out ninety-five theses, or reasons, why he did not believe the practice justifiable, detailed the abuses, set forth what he conceived to be the true Christian doctrine in the matter, and challenged all comers to a debate on the theses (**R. 151**). Following true university custom, also, these theses were made out in Latin, and in October, 1517, Luther followed still another university custom and nailed them to the church door in Wittenberg. Luther was probably as much surprised as any one to find that these were at once translated into German, printed, and in two weeks had been scattered all over Germany. Within a month they were known in all the important centers of the Western Christian world. They had been carried everywhere on the currents of discontent. Luther at first intended no revolt from the Church, but *only a protest* against its practices. From one step *to another, though, he* was gradually led into open rebellion, and

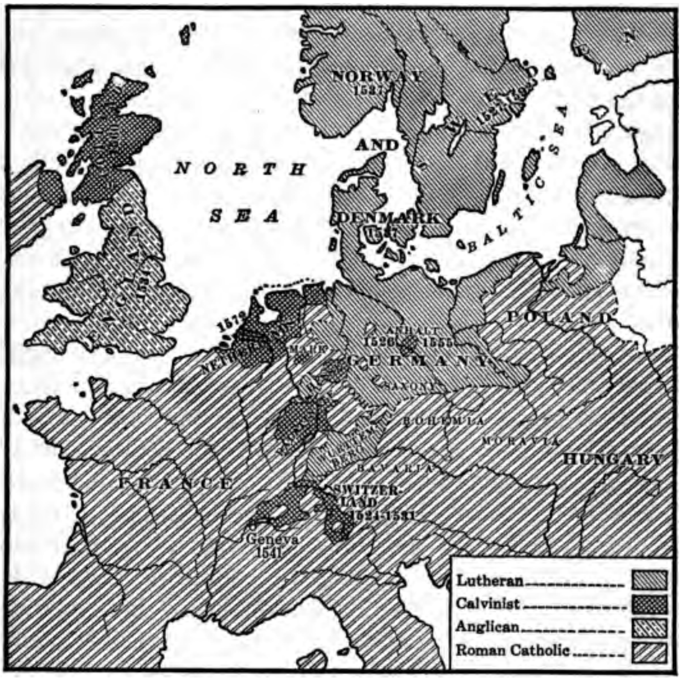

FIG. 33. SHOWING THE RESULTS OF THE PROTESTANT REVOLTS

finally, in 1520, was excommunicated from the Church. He then expressed his defiance by publicly burning the bull of excommunication, together with a volume of the canon law. This was open rebellion, and such heresy (**R. 152**) must needs be stamped out. Luther took his stand on the authority of the Scriptures, and the battle was now joined between the forces representing the authority of the Church *versus* the authority of the Bible, and salvation through the Church *versus* salvation through personal faith and works. Luther also forced the issue for freedom of thought in religious matters. It was, to be sure, some three centuries before freedom in religious thinking and worship became clearly recognized, but what the early university masters and scholars had stood for in intellectual matters, Luther now asserted in religious affairs as well.

We do not need to follow the details of the conflict. Suffice it to know that great portions of northern and western Germany followed Luther, as is shown in Figure 33, and that the Western Church, which had remained one for so many centuries and been the one great unifying force in western Europe, was permanently split by the Protestant Revolt. The large success of Luther is easily explained by the new life which now permeated western Europe. The world was rapidly becoming modern, while the Church, with a perversity almost unexplainable, insisted upon remaining mediæval and tried to force others to remain mediæval with it.

FIG. 34. HULDREICH ZWINGLI (1487–1531)

Revolts in other lands. The outbreak in Germany soon spread to other lands. Lutheranism made rapid headway in Denmark, where the German grievances against Italian rule were equally familiar, and in 1537 the Danish Diet severed all connection with Rome and established Lutheranism as the religion of the country. Norway, being then a part of Denmark, was carried for Lutheranism also. In Sweden the Church was shorn of some of its powers and property in 1527, and in 1592 Lutheranism was definitely adopted as the religion for the nation. This included Finland, then a part of Sweden. An independent reform movement, closely akin to Lutheranism in its aims, made considerable headway in German Switzerland contemporaneously with the reform work of Luther in Germany. This was under the leadership of a popular humanist preacher in Zurich by the name of Huldreich Zwingli.

In England the struggle came nominally over the divorce (1533) of Henry VIII from Catherine of Aragon, though the independence of the English Church had been asserted from time to time for two centuries, and a free National Church had for long been a growing ideal with English statesmen. In 1534 Parliament passed the Act of Supremacy (**R. 153**) which severed England from Rome. By it the King was made head of the English National Church. The change was in no sense a profound one, such as had taken place in Lutheran Germany. The priests who took the new oath of allegiance to the King instead of the Pope as the head of the Church, as most of them did, continued in the churches, the service was changed to English, some reforms were instituted, but the people did not experience any great change in religious feeling or ideas. This new National Church became known as the English or Anglican Church.

So far as the early history of America is concerned, the most important reform movement was neither Lutheranism nor Anglicanism, but Calvinism. In 1537 John Calvin, a French Protestant who had fled to Switzerland, was invited to submit a plan for the educational and religious reorganization of the city of Geneva, and in 1541 he was entrusted with the task of organizing there a little religious City-Republic. For this he established a combined church and city government, in which religious affairs and the civil government were as closely connected as they had ever been in any Catholic country. During the twenty-three years that Calvin dominated Geneva it became the Rome of Protestantism.

FIG. 35. JOHN CALVIN (1509–1564)
(Drawn from a contemporary painting)

From Geneva a reformed Calvinistic religion spread over northern France, where its followers became known as Huguenots; to Scotland (1560) where they were known as Scotch Presbyterians;

to the Netherlands (1572) where originated the Dutch Reformed Church; and to portions of central England, where those who embraced it became known as *Puritans*. Through the Puritans who settled New England, and later through the Huguenots in the Carolinas, the Scotch Presbyterians in the central colonies, and the Dutch in New York, Calvinism was carried to America, was for long the dominant religious belief, and profoundly colored all early American education. Lutheranism also came in through the Swedes along the Delaware and the Germans in Pennsylvania, while the Anglican Church, known in America as the *Episcopalian*, came in through the landed aristocracy in Virginia and the later settlers in New York. The early settlement of America was thus a Protestant settlement, while the migration to America of large numbers of peoples from Catholic lands is a relatively recent movement.

Religious freedom and religious warfare. Of course the revolt against the authority of the Church, once inaugurated, could not be stopped. The same right to freedom in religious belief which Luther claimed for himself and his followers had of course to be extended to others. This the Protestants were not much more willing to grant than had been the Catholics before them. The world was not as yet ready for such rapid advances, and religious toleration, though established in principle by the revolt, was an idea to which the world has required a long time to become accustomed. It took two centuries of intermittent religious warfare, during which Catholic and Protestant waged war on one another, plundered and pillaged lands, and murdered one another for the salvation of their respective souls, before the people of western Europe were willing to stop fighting and begin to recognize for others that which they were fighting for for themselves. When religious tolerance finally became established by law, civilization had made a tremendous advance.

Changed attitude toward the old problems. The Peace of Westphalia (1648), which ended the bloody Thirty Years' War, itself the culmination of a century of bitter and vindictive religious strife, has often been regarded as both an end and a beginning. Though the persecution of minorities for a time continued, especially in France, this treaty marked the end of the attempt of the Church and the Catholic States to stamp out Protestantism on the continent of Europe. The religious independence of the Protestant States was now acknowledged, and the beginnings of religious freedom were established by treaty. This new freedom of conscience, once definitely begun for the ruling princes, was certain in time to be extended further. Ultimately the day must come, though it might be centuries away, when individual as well as national freedom in religious matters must be granted as a right, and one of the greatest blessings of mankind finally be firmly established by law.

Physically exhausted, and recognizing at last the futility of fire and sword as means for stamping out opposing religious convictions, but still thoroughly convinced as to the correctness of their respective points of view, both sides now settled down to another century and more of religious hatred, suspicion, and intolerance, and to a close supervision of both preaching and teaching as safeguards to orthodoxy. During the century following the Peace of Westphalia greater reliance than ever before was placed on the school as a means for protecting the faith, and the pulpit and the school now took the place of the sword and the torch as converting and holding agents.

Religious reform. The effect of the Protestant Revolts on the Church was good. For the first time in history Catholic churchmen learned that they could not rely on the general acceptance of any teachings they promulgated, or any practices they saw fit to approve. The spirit of inquiry which had been aroused by the methods of the humanists would in the future force them to explain and to defend. If they were to make headway against this great rebellion they must reform abuses, purify church practices, and see that monks and clergy led upright Christian lives. Unless the mass of the people could be made loyal to the Church by reverence for it, further revolts and the ultimate break-up of the institution were in prospect. The Council of Trent (1545–63) at last undertook the reform which should have come at least a century before. Better men were selected for the church offices, and bishops and clergy were ordered to reside in their proper places and to preach regularly. New religious orders arose, whose purpose was to prepare priests better for the service of the Church and for ministry to the needs of the people. Irritating practices were abandoned. The laws and doctrines of the Church were restated, in new and better form. Moral reforms were instituted. In most particulars the reforms forced by the work of Luther were thorough and complete, and since the middle of the sixteenth century *the Catholic Church,* in morals and government, has been a reformed Church. Above all, attention was turned to education rather than force as a means of winning and holding territory. A rigid quarantine was, however, established in Catholic lands against the further spread of heretical textbooks and literature. Especially was the reading of the Bible, which had been the cause of all the trouble, for a time rigidly prohibited.

Such, in brief, are the historical facts connected with the various revolts against authority which split the Roman Catholic Church in the sixteenth century. These have been stated, as briefly and as impartially as possible, because so much of future educational history arose out of the conditions resulting from these revolts. The early educational history of America is hardly understandable without some knowledge of the religious forces awakened by the work of the Protestants. To the educational significance and consequences of these revolts we next turn.

QUESTIONS FOR DISCUSSION

1. How do you explain the difference in the effect, on the scholars of the time, of the Revival of Learning in Italy and in northern lands?
2. How do you explain the serious church opposition to the different attempts of northern scholars to try to turn the Church back to the simpler religious ideals and practices of early Christianity?
3. Explain how opposition to the practices of the Church could be organized into a political force.
4. Explain the analogy of a heretic in the fifteenth century and an anarchist of to-day.
5. Assuming that the Church had encouraged progressive evolution as a policy, and thus warded off revolution and disruption, in what ways might history have been different?
6. How can the bitter opposition to the reading and study of the Bible be explained?
7. Show the analogy between the freedom of thinking demanded by Luther, and that obtained three centuries earlier by the scholars in the rising universities. Why were the universities not opposed?
8. Enumerate the changes which had taken place in western Europe between the days of Wycliffe and Huss and the time of Luther, which enabled him to succeed where they had failed.
9. Explain in what ways the Protestant Revolt was essentially a revolution in thinking, and that, once started, certain other consequences must inevitably follow in time.
10. Was it perfectly natural that the reformers should refuse to their followers the same right to revolt, and separate off into smaller and still different sects, which they had contended for for themselves? Why?
11. On what basis could Catholic and Protestant wage war on one another to try to enforce their own particular belief?

SELECTED READINGS

In the accompanying *Book of Readings* the following selections are reproduced:

147. Wycliffe: On the Enemies of Christ.
148. Wycliffites: Attack the Pope and the Practice of Indulgences.
149. Council of Constance: List of Church Abuses demanding Reform.
150. Geiler: A German Priest's View as to Coming Reform.
151. Luther: Illustrations from his Ninety-Five Theses.
152. Saint Thomas Aquinas: On the Treatment of Heresy.
153. Henry VIII: The English Act of Supremacy.

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CHAPTER XIII

EDUCATIONAL RESULTS OF THE PROTESTANT REVOLTS

I. AMONG LUTHERANS AND ANGLICANS

Ultimate consequences of the break with authority. That the Protestant Revolts in the different lands produced large immediate and permanent changes in the character of the education provided in the revolting States is no longer accepted as being the case. In every phase of educational history growth has proceeded by evolution rather than by revolution, and this applies to the Protestant Revolts as well as to other revolutions. Many changes naturally resulted at once, some of which were good and some of which were not, while others which were enthusiastically attempted failed of results because they involved too great advances for the time. Much, too, of the progress that was inaugurated was lost in the more than a century of religious strife which followed, and the additional century and more of suspicion, hatred, religious formalism, and strict religious conformity which followed the period of religious strife. The educational significance of the reformation movement, though, lies in the far-reaching nature of its larger results and ultimate consequences rather than in its immediate accomplishments, and because of this the importance of the immediate changes effected have been overestimated by Protestants and underestimated by Catholics.

The dominant idea underlying Luther's break with authority, and for that matter the revolts of Wycliffe, Huss, Zwingli, and Calvin as well, was that of substituting the authority of the Bible in religious matters for the authority of the Church; of substituting individual judgment in the interpretation of the Scriptures and in formulating decisions as to Christian duty for the collective judgment of the Church; and of substituting individual responsibility for salvation, in Luther's conception of justification through personal faith and prayer, for the collective responsibility for salvation of the Church. Whether one believes that the Protestant position was sound or not depends almost entirely upon one's religious training and beliefs, and need not concern us here, as it makes no difference with the course of history. We can believe either way, and the course that history took remains the same. The educational consequences of the position taken by the Protestants, though, are important.

Under the older theory of collective judgment and collective responsibility for salvation — that is, the judgment of the Church rather than that of individuals — it was not important that more than a few be educated. Under the new theory of individual judgment and individual responsibility promulgated by the Protestants it became very important, in theory at least, that every one should be able to read the word of God, participate intelligently in the church services, and shape his life as he understood was in accordance with the commandments of the Heavenly Father. This undoubtedly called for the education of all. Still more, from individual participation in the services of the Church, with freedom of judgment and personal responsibility in religious matters, to individual participation in and responsibility for the conduct of government was not a long step, and the rise of democratic governments and the provision of universal education were the natural and ultimate corollaries, though not immediately attained, of the Protestant position regarding the interpretation of the Scriptures and the place and authority of the Church. This was soon seen and acted upon. The great struggle of the sixteenth and seventeenth centuries, in consequence, became one for religious freedom and toleration; the great struggle of the eighteenth and nineteenth centuries has been for political freedom and political rights; to supply universal education has been left to the nineteenth and the twentieth centuries.

A new demand for vernacular schools. The invention of printing and the Protestant Revolts were in a sense two revolutionary forces, which in combination soon produced vast and far-reaching changes. The discovery of the process of making paper and the invention of the printing-press changed the whole situation as to books. These could now be reproduced rapidly and in large numbers, and could be sold at but a small fraction of their former cost. The printing of the Bible in the common tongue did far more to stimulate a desire to be able to read than did the Revival of Learning (**Rs. 155, 170**). Then came the religious discussions of the Reformation period, which stirred intellectually the masses of the people in northern lands as nothing before in history had ever done.

The leaders of the Protestant Revolts, too, in asserting that each person should be able to read and study the Scriptures as a means to personal salvation, created an entirely new demand, in Protestant lands, for elementary schools in the vernacular. Heretofore the demand had been for schools only for those who expected to become scholars or leaders in Church or State, while the masses of the people had little or no interest in learning. Now a new class became desirous of learning to read, not Latin, but the language which they had already learned to speak. Luther, besides translating the Bible, had prepared two general Catechisms, one for adults and one for children, had written hymns, and issued numerous letters and sermons in behalf of religious education. In his sermons and addresses he urged a study of the Bible and the duty of sending children to school. Calvin's Catechism similarly was extensively used in Protestant lands.

1. *Lutheran School Organization*

Educational ideas of Luther. Luther enunciated the most progressive ideas on education of all the German Protestant reformers. In his *Letter to the Mayors and Aldermen of all the Cities of Germany in behalf of Christian Schools* (1524) (**R. 156**), and in his *Sermon on the Duty of Sending Children to School* (1530), we find these set forth. That his ideas could be but partially carried out is not surprising. There were but few among his followers who could understand such progressive proposals, they were entirely too advanced for the time, there was no body of vernacular teachers or means to prepare them, the importance of such training was not understood, and the religious wars which followed made such educational advantages impossible, for a long time to come. The sad condition of the schools, which he said were "deteriorating throughout Germany," awakened his deep regret, and he begged of those in authority "not to think of the subject lightly, for the instruction of youth is a matter in which Christ and all the world are concerned." All towns had to spend money for roads, defense, bridges, and the like, and why not some for schools? This they now could easily afford, "since Divine Grace has released them from the exaction and robbery of the Roman Church." Parents continually neglected their educational duty, yet there must be civil government. "Were there neither soul, heaven, nor hell," he declared, "it would still be necessary to have schools for the sake of affairs here below. . . . The world has need of educated men and women to the end that men may govern the country properly and women may properly bring up their children, care for their domestics, and direct the affairs of their households." "The welfare of the State depends upon the intelligence and virtue of its citizens," he said, "and it is therefore the duty of mayors and aldermen in all cities to see that Christian schools are founded and maintained" (**R. 156**).

The parents of children he held responsible for their Christian and civic education. This must be free, and equally open to all — boys and girls, high and low, rich and poor. It was the inherent right of each child to be educated, and the State must not only see that the means are provided, but also require attendance at the schools (**R. 158**). At the basis of all education lay Christian education. The importance of the services of the teacher was beyond ordinary comprehension (**R. 157**). Teachers should be trained for their work, and clergymen should have had experience as teachers. A school system for German people should be a state system, divided into:

1. *Vernacular Primary Schools.* Schools for the common people, to be taught in the vernacular, to be open to both sexes, to include reading, writing, physical training, singing, and religion, and to give practical instruction in a trade or in household duties. Upon this attendance should be compulsory. "It is my opinion," he said, "that we should send boys to school for one or two hours a day, and have them learn a trade at home the rest of the time. It is desirable that these two occupations march side by side."
2. *Latin Secondary Schools.* Upon these he placed great emphasis (**R. 156**) as preparatory schools by means of which a learned clergy was to be perpetuated for the instruction of the people. In these he would teach Latin, Greek, Hebrew, rhetoric, dialectic, history, science, mathematics, music, and gymnastics.
3. *The Universities.* For training for the higher service in Church and State.

Early German state school systems. The first German State to organize a complete system of schools was Würtemberg (**R. 162**), in southwestern Germany, in 1559. This marks the real beginning of the German state school systems. Three classes of schools were provided for:

(1) Elementary schools, for both sexes, in which were to be taught reading, writing, reckoning, singing, and religion, all in the vernacular. These were to be provided in every village in the Duchy.

(2) Latin schools (*Particularschulen*), with five or six classes, in which the ability to read, write, and speak Latin, together with the elements *of mathematics and Greek* in the last year, were to be taught.

(3) The universities or colleges of the State, of which the University of Tübingen (f. 1476) and the higher school at Stuttgart were declared to be constituent parts.

Acting through the church authorities, these schools were to be under the supervision of the State.

The example of Würtemberg was followed by a number of the smaller German States. Ten years later Brunswick followed the same plan, and in 1580 Saxony revised its school organization after the state-system plan thus established. In 1619 the Duchy of Weimar added compulsory education in the vernacular for all children from six to twelve years of age. In 1642, the same date as the first Massachusetts school law (chapter xv), Duke Ernest the Pious of little Saxe-Gotha and Altenburg established the first school system of a modern type in German lands. An intelligent and ardent Protestant, he attempted to elevate his miserable peasants, after the ravages of the Thirty Years' War, by a wise economic administration and universal education. With the help of a disciple of the greatest educational thinker of the period, John Amos Comenius (chapter xvii), he worked out a School Code (*Schulmethode*, 1642) which was the pedagogic masterpiece of the seventeenth century (R. 163). In it he provided for compulsory school attendance, and regulated the details of method, grading, and courses of study. Teachers were paid salaries which for the time were large, pensions for their widows and children were provided, and textbooks were prepared and supplied free. So successful were his efforts that Gotha became one of the most prosperous little spots in Europe, and it was said that "Duke Ernest's peasants were better educated than noblemen anywhere else."

By the middle of the seventeenth century most of the German States had followed the Würtemberg plan of organization. Even Duke Albrecht V of Bavaria, which was a Catholic State, ordered the establishment of "German schools" throughout his realm, with instruction in reading, writing, and the Catholic creed, the schools to be responsible through the Church to the State.

Protestant state school organization. We see here in German lands a new, and, for the future, a very important tendency. Throughout all the long Middle Ages the Church had absolutely *controlled* all education. From the suppression of the pagan *schools, in 529* A.D., to the time of the Reformation there had been no one to dispute with the Church its complete monopoly of education. Even Charlemagne's attempt at the stimulation of educational activity had been clearly within the lines of church control. Until the beginnings of the modern States, following the Crusades, the Church had been the State as well, and for long humbled any ruler who dared dispute its power. In the later Middle Ages nobles and rising parliaments had at times sided with the king against the Church — warnings of a changing Europe that the Church should have heeded — but there had been no serious trouble with the rising nationalities before the sixteenth century. Now, in Protestant lands, all was changed. The authority of the Church was overthrown. By the Peace of Augsburg (1555) each German prince and town and knight were to be permitted to make choice between the Catholic and Lutheran faith, and all subjects were to accept the faith of their ruler or emigrate.

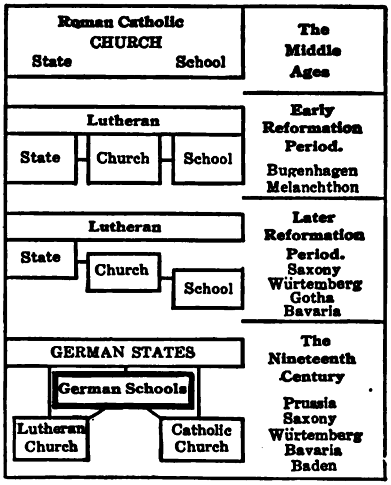

FIG. 36. EVOLUTION OF GERMAN STATE SCHOOL CONTROL

This established freedom of conscience for the rulers, but for no one else. It also gave them control of both religious and secular affairs, thus uniting in the person of the ruler, large or small, control of both Church and State. This was as much progress toward religious freedom as the world was then ready for, as Church and State had been united for so many centuries that a complete separation of the two was almost inconceivable. It was left for the United States (1787) to completely divorce Church and State, and to reduce the churches to the control of purely spiritual affairs.

The German rulers, however, were now free to develop schools as they saw fit, and, through their headship of the Church in their principality or duchy or city, to control education therein. We have here the beginnings of the transfer of educational control *from the Church to the State*, the ultimate fruition of which came first in German lands, and which was to be the great work of the nineteenth century. It was through the kingly or ducal headship of the Church, and through it of the educational system of the kingdom or duchy, that the great educational development in Würtemberg, Saxony, and Gotha was brought about by their rulers, and it was through the ruling princes that the German universities were reformed and the new Protestant universities established. Even in Catholic States, as Bavaria, the German state-control idea took root early. Many of the important features of the modern German school systems are to be seen in their beginnings in the Lutheran state-church schools.

2. *Anglican foundations*

The Reformation and education in England. The Reformation in England took a very different direction from what it did in Germany, and its educational results in consequence were very different. In England the reform movement was much more political in character than in German lands. Henry VIII was no Protestant, in the sense that Luther or Calvin or Zwingli or Knox was. He distrusted their teachings, and was always anxious to explain objections to the old faith. The people of England as a body, too, had been much less antagonized by the exactions of the Roman Church and the immoral lives of the monks and Roman clergy; the new learning had awakened there somewhat less of a spirit of moral and religious reform; and the reformation movement of Luther, after a decade and a half, had roused no general interest. The change from the Roman Catholic faith to an independent English Church, when made, was in consequence much more nominal than had been the case in German lands. As a result the severance from Rome was largely carried out by the ruling classes, and the masses of the people were in no way deeply interested in it. The English National Church merely took over most of the functions formerly exercised by the Roman Church, in general the same priests remained in charge of the parish churches, and the church doctrines and church practices were not greatly altered by the change in allegiance. The changing of the service from Latin to English was perhaps the most important change. The English Church, in spirit and service, has in consequence retained the greatest resemblance to the Roman Catholic Church of any Protestant denomination. In particular, the Lutheran idea of personal responsibility for salva-

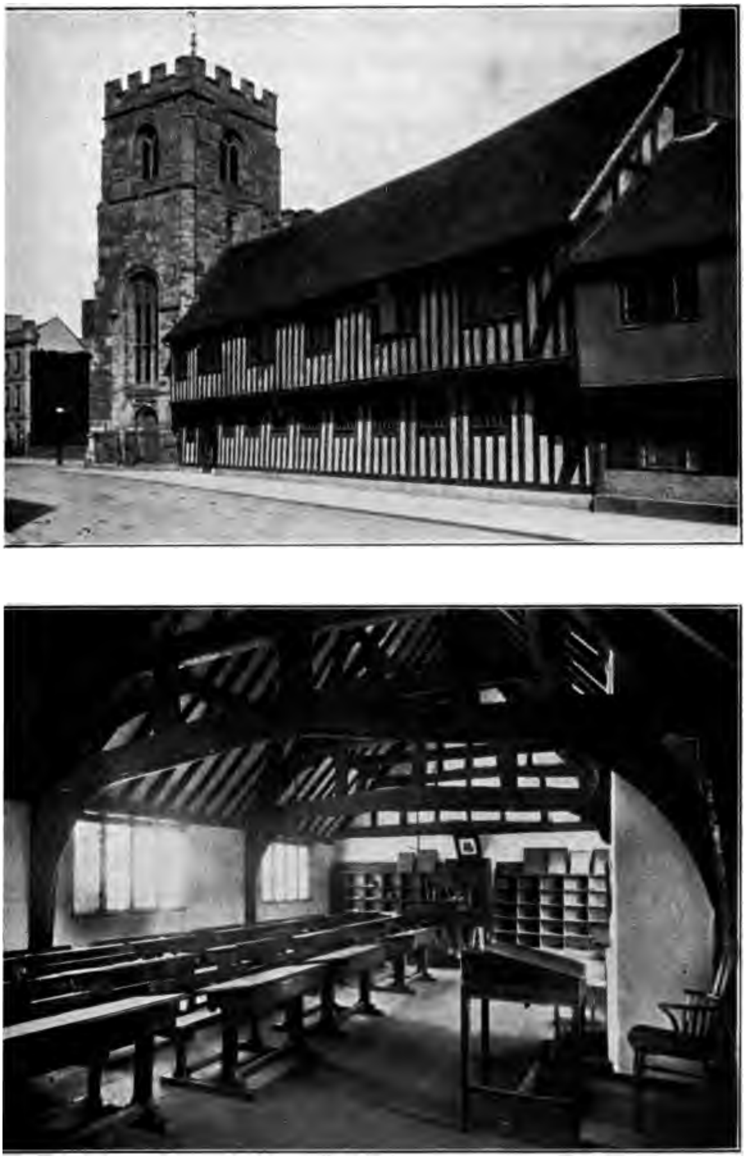

PLATE 2. STRATFORD-ON-AVON GRAMMAR SCHOOL

ablished by the Holy Cross Guild of Stratford-on-Avon, at the beginning of the eenth century. The Grammar School was built in 1426, of wood, and at a cost 10, 5*s*., 3½*d*. The stone guild-chapel to the left is older. The school was held on the er floor, the lower being used as a guild-hall. Here Shakespeare went to school, l saw companies of strolling players in the hall below. The lower picture shows *grammar-school room after* its "restoration," in 1892.

tion, and hence the need of all being taught to read, made scarcely any impression in England.

By the time of Elizabeth (1558–1603) it had become a settled conviction with the English as a people that the provision of education was a matter for the Church, and was no business of the State, and this attitude continued until well into the nineteenth century. The English Church merely succeeded the Roman Church in the control of education, and now licensed the teachers (**R. 168**), took their oath of allegiance (**R. 167**), supervised prayers (**R. 169**) and the instruction, and became very strict as to conformity to the new faith (**Rs. 164–166**), while the schools, aside from the private tuition and endowed schools, continued to be maintained chiefly from religious sources, charitable funds, and tuition fees. Private tuition schools in time flourished, and the tutor in the home became the rule with families of means. The poorer people largely did without schooling, as they had done for centuries before. As a consequence, the educational results of the change in the headship of the Church relate almost entirely to grammar schools and to the universities, and not to elementary education. The development of anything approaching a system of elementary schools for England was consequently left for the educational awakening of the latter half of the nineteenth century. When this finally came the development was due to political and economic, and not to religious causes.

Result of the Reformation in England. The result of the change in religious allegiance in England was a material decrease in the number of places offering grammar-school advantages, though with a material improvement in the quality of the instruction provided, and a consequent decrease in the number of boys given free education in the refounded grammar schools. As for elementary education, the abolition of the song, chantry, and hospital schools took away most of the elementary schools which had once existed. The clerk of the parish usually replaced them by teaching a certain number of boys "to read English intelligently instead of Latin unintelligently," many new parish elementary schools were created, especially during the reign of Elizabeth, and in time the dame school, the charity school, the writing school, and apprenticeship training arose (chapter XVIII) and became regular English institutions. These types of schooling constituted almost all the elementary-school advantages provided in England until well into the eighteenth century.

The dominating religious purpose. The religious conflicts following the reformation movement everywhere intensified religious prejudices and stimulated religious bigotry. This was soon reflected in the schools of all lands. In England, after the restoration under Catholic Mary (1553–58) and the final reëstablishment of the English Church under Elizabeth (1558), all school instruction became narrowly religious and English Protestant in type. By the middle of the seventeenth century the grammar schools had become nurseries of the faith, as well as very formal and disciplinary in character. In England, perhaps more than in any other Protestant country, Christianity came to be identified with a strict conformity to the teachings and practices of the Established Church, and to teach that particular faith became one of the particular missions of all types of schools. Bishops were instructed to hunt out schoolmasters who were unsound in the faith (**R. 164 a**), and teachers were deprived of their positions for nonconformity (**R. 164 b**). More effectively to handle the problem a series of laws were enacted, the result of which was to institute such an inquisitorial policy that the position of schoolmaster became almost intolerable. In 1580 a law (**R. 165**) imposed a fine of £10 on any one employing a schoolmaster of unsound faith, with disability and imprisonment for the schoolmaster so offending; in 1603 another law required a license from the bishop on the part of all schoolmasters as a condition precedent to teaching; in 1662 the obnoxious Act of Uniformity (**R. 166**) required every schoolmaster in any type of school, and all private tutors, to subscribe to a declaration that they would conform to the liturgy of the Church, as established by law, with fine and imprisonment for breaking the law; in 1665 the so-called "Five-Mile Act" forbade Dissenters to teach in any school, under penalty of a fine of £40; and in that same year bishops were instructed to see that

> the said schoolmasters, ushers, schoolmistresses, and instructors, or teachers of youth, publicly or privately, do themselves frequent the public prayers of the Church, and cause their scholars to do the same; and whether they appear well affected to the Government of his Majesty, and the doctrine and discipline of the Church of England.

This attitude also extended upward to the universities as well, where nonconformists were prohibited by law (1558) from receiving degrees, a condition that was not remedied until 1871. The great purpose of instruction came to be to support the authority and the rule of the Established Church, and the almost complete purpose of elementary instruction came to be to train pupils to read the Catechism, the Prayer Book, and the Bible. This intense religious attitude in England was reflected in early colonial America, as we shall see in a following chapter.

QUESTIONS FOR DISCUSSION

1. Why is progress that is substantial nearly always a product of slow rather than rapid evolution?
2. Show why the evolution of many Protestant sects was a natural consequence of the position assumed by Luther. What is the ultimate outcome of the process?
3. Why was it not important that more than a few be educated under the older theory of salvation?
4. Show how modern democratic government was a natural consequence of the Protestant position.
5. Why was universal education involved as a later but ultimate consequence of the position taken by the Protestants?
6. Explain why the local Church authorities, before 1520, tried so hard to prevent the establishment of vernacular schools.
7. Explain why the religious discussions of the Reformation should have so strongly stimulated a desire to read.
8. Explain the fixing in character of the German, French, and English languages by a single book. What had fixed the Italian?
9. Was Luther probably right when he wrote, in 1524, that the schools "were deteriorating throughout Germany"? Why?
10. Give reasons why Luther's appeals for schools were not more fruitful.
11. What was the significance of the position of Luther for the future education of girls?
12. Was Luther's idea that a clergyman should have had some experience as a teacher a good one, or not? Why?
13. How do you explain Luther's ideas as to coupling up elementary and trade education in his primary schools?
14. Point out the similarity of Luther's scheme for a school system with the German school system as finally evolved (Figure 36).
15. Explain why the Lutheran idea of personal responsibility for salvation made so little headway in England, and show that the natural educational consequences of this resulted.
16. Show what different conditions were likely to follow, in later centuries, from the different stands taken as to the relation of the State and Church to education by the German people by the middle of the sixteenth century, and by the English at the time of Elizabeth.
17. Compare the origin of the vernacular elementary-school teacher in Germany and England.
18. Leach estimates that, in 1546, there were approximately three hundred grammar schools in England for a total population of approximately two and one half millions. About what opportunities for grammar-school education did this afford?

SELECTED READINGS

In the accompanying *Book of Readings* the following selections are reproduced:

154. Rashdall: Diffusion of Education in Mediæval Times.
155. Times: The Vernacular Style of the Translation of the Bible.
156. Luther: To the Mayors and Magistrates of Germany.
157. Luther: Dignity and Importance of the Teacher's Work.
158. Luther: On the Duty of Compelling School Attendance.
159. Hamburg: An Example of a Lutheran *Kirchenordnung.*
160. Brieg: An Example of a Lutheran *Schuleordnung.*
161. Melanchthon: The Saxony School Plan.
162. Raumer: The School System Established in Würtemberg.
163. Duke Ernest: The *Schulemethodus* for Gotha.
164. Strype: The Supervision of a Teacher's Acts and Religious Beliefs in England.
    (*a*) Letter of Queen's Council on.
    (*b*) Dismissal of a Teacher for non-conformity.
165. Elizabeth: Penalties on Non-conforming Schoolmasters.
166. Statutes: English Act of Uniformity of 1662.
167. Carlisle: Oath of a Grammar School Master.
168. Strype: An English Elementary-School Teacher's License.
169. Cowper: Grammar School Statutes regarding Prayers.
170. Green: Effect of the Translation of the Bible into English.
171. Old MS.: Ignorance of the Monks at Canterbury and Messenden.
172. Parker: Refounding of the Cathedral School at Canterbury.
173. Nicholls: Origin of the English Poor-Law of 1601.
174. Statutes: The English Poor Law of 1601.

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*Montmorency, J. E. G. de. *The Progress of Education in England.*
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Paulsen, Fr. *German Education.*
Richard, J. W. *Philipp Melanchthon, the Protestant Preceptor of Germany.*
Woodward, W. H. *Education during the Renaissance.*

CHAPTER XIV

EDUCATIONAL RESULTS OF THE PROTESTANT REVOLTS

II. AMONG CALVINISTS AND CATHOLICS

3. *Educational work of the Calvinists*

The organizing work of Calvin. From the point of view of American educational history the most important developments in connection with the Reformation were those arising from Calvinism. While the Calvinistic faith was rather grim and forbidding, viewed from the modern standpoint, the Calvinists everywhere had a program for political, economic, and social progress which has left a deep impress on the history of mankind. This program demanded the education of all, and in the countries where Calvinism became dominant the leaders included general education in their scheme of religious, political, and social reform. In the governmental program which Calvin drew up (1537) for the religious republic at Geneva (p. 159), he held that learning was "a public necessity to secure good political administration, sustain the Church unharmed, and maintain humanity among men."

In his plan for the schools of Geneva, published in 1538, he outlined a system of elementary education in the vernacular for all, which involved instruction in reading, writing, arithmetic, religion, careful grammatical drill, and training for civil as well as for ecclesiastical leadership. In his plan of 1541 he upholds the principle, as had Luther, that "the liberal arts and good training are aids to a full knowledge of the Word." This involved the organization of secondary schools, or *colleges* as he called them, following the French nomenclature, to prepare leaders for the ministry and the civil government through "instruction in the languages and humane science." In the colleges (secondary schools) which he organized at Geneva and in neighboring places to give such training, and which became models of their kind which were widely copied, the usual humanistic curriculum was combined with intensive religious instruction. These colleges became famous as institutions from which learned men came forth. The course of study in the seven classes of one of the

Geneva colleges, which has been preserved for us, reveals the nature of the instruction (**R. 175**). The men who went forth from the colleges of Geneva to teach and to preach the Calvinistic gospel were numbered by the hundreds.

The world owes much to the constructive, statesman-like genius of Calvin and those who followed him, and we in America probably most of all. Geneva became a refuge for the persecuted Protestants from other lands, and through such influences the ideas of Calvin spread to the Huguenots in France, the Walloons of the Dutch and Belgian Netherlands, the Germans in the Palatinate, the Presbyterians of Scotland, the Puritans in England, and later to the American colonies.

Calvinism in other lands. The great educational work done by the Calvinists in France, in the face of heavy persecution, deserves to be ranked with that of the Lutherans in Germany in its importance. Had the Calvinists had the same opportunity for free development the Lutherans had, and especially their state support, there can be little doubt that their work would have greatly exceeded the Lutherans in importance and influence on the future history of mankind.

True to the Calvinistic teaching of putting principles into practice, they organized an extensive system of schools, extending from elementary education for all, through secondary schools or colleges, up to eight Huguenot universities. As a people they were thrifty and capable of making great sacrifices to carry out their educational ideals. The education they provided was not only religious but civil; not only intellectual but moral, social, and economic. Education was for all, rich and poor alike. Their synods made liberal appropriations for the universities, while municipalities provided for colleges and elementary education. They emphasized, in the lower schools, the study of the vernacular and arithmetic, and in the colleges Greek and the New Testament. The long list of famous teachers found in their universities reveals the character of their instruction.

In the Palatinate (see map, Figure 33) some progress in founding churches and schools was made, especially about Strassburg, and the universities of Heidelberg and Marburg became the centers of Huguenot teaching. In the Dutch Netherlands, and in that part of the Belgian Netherlands inhabited by the Walloons, Calvinist ideas as to education dominated. The universities of Leyden (f. 1575), Groningen (f. 1614), Amsterdam (f. 1630), and

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John Knox, the leader of the Scottish Reformation (1560), who had spent some time at Geneva and who was deeply impressed by the Calvinistic religious-state found there, introduced the Calvinistic religious and educational ideas into Scotland. The educational plan proposed by Knox would have called for a large expenditure of money, and this the thrifty Scotch were not ready for. Knox and his followers then proposed to endow the new schools from the old church and monastic foundations, but the Scottish nobles hoped to share in these, as had the English nobility under Henry VIII, and Knox's plan was not approved. This delayed the establishment of a real national system of education for Scotland until the nineteenth century. The new Church, however, took over the superintendence of education in Scotland, and when parish schools were finally established by decree of the Privy Council, in 1616, and by the legislation of 1633 and 1646 (**R. 179**), the Church was given an important share in their organization and management. These schools, while not always sufficient in number to meet the educational needs, were well taught, and have deeply influenced the national character.

4. *The Counter-Reformation of the Catholics*

The Jesuit Order. The Protestant Revolt made but little headway in Italy, Spain, Portugal, much of France, or southern Belgium (see map, p. 157). Italy was scarcely disturbed at all, while in France, where of all these countries the reform ideas had made greatest progress, nine tenths of the people remained loyal to Rome. In a general way it may be stated that those parts of western Europe which had once formed an integral part of the old Roman Empire remained loyal to the Roman Church, while those which had been the homes of the Germanic tribes revolted. Now it naturally happened that the countries which remained loyal to the old Church experienced none of the feelings of the necessity for education as a means to personal salvation which the Lutherans and Calvinists felt. There, too, the church system of education which had developed during the long Middle Ages remained undisturbed and largely unchanged. The Church as an institution, though, learned from the Protestants the value of education as a means to larger ends, and soon set about using it.

After the Church Council of Trent (1545–63), where definite church reform measures were carried through (p. 161), the Catholics inaugurated what has since been called a counter-reformation, in an effort to hold lands which were still loyal and to win back lands which had been lost. Besides reforming the practices and outward lives of the churchmen, and reforming some church practices and methods, the Church inaugurated a campaign of educational propaganda. In this last the chief reliance was upon a new and a very useful organization officially known as the "Society of Jesus," but more commonly called the "Jesuit Order." This order was organized along strictly military lines, all members being responsible to its General, and he in turn alone to the Pope. The quiet life of the cloister was abandoned for a life of open warfare under a military discipline. The Jesuit was to live in the world, and all peculiarities of dress or rule which might prove an obstacle to worldly success were suppressed. The purposes of the Order were to combat heresy, and to strengthen the authority of the Papacy. Its founder was Ignatius de Loyola. Its motto was *Omnia ad Majorem Dei Gloriam* (that is, All for the greater glory of God), and the means to be employed by it to accomplish these ends were the pulpit, the confessional, the mission, and the school. Of these the school was given the place of first importance. Realizing clearly that the real cause of the Reformation had been the ignorance, neglect, and vicious lives of so many monks and priests and the extortion and neglect practiced by the Church, and that the chief difficulty was in the higher places of authority, it became the prime principle of the Order to live upright and industrious lives themselves, and to try to reach and train those likely to be the future leaders in Church and State. With the education of the masses of the people the Order was not concerned. Our interest lies only with the educational work of

FIG. 38. IGNATIUS DE LOYOLA (1491–1556)

this Order, a work in which it was remarkably successful and through which it exercised a very large influence.

Great success of the Order. The service of the Order to the Church in combating Protestant heresies was very marked. They did much, single-handed, to roll back the tide of Protestantism which had advanced over half of western Europe, and to hold other countries true to the ancient faith.

The colleges were usually large and well-supported institutions, with dormitories, classrooms, dining-halls, and playgrounds. The usual number of scholars in each was about 300, though some had an attendance of 600 to 800, and a few as high as 2000. At their period of maximum influence the colleges and universities of the Order probably enrolled a total of 200,000 students. Their graduates were prominent in every scholarly and governmental activity of the time. As far as possible the pupils were a selected class to whom the Order offered free instruction. The children of the nobility and gentry, and the brightest and most promising youths of the different lands were drawn into their schools. The children of many Protestants, also, were attracted by the high quality of the instruction offered. There they were given the best secondary-school education of the time, and received, at an impressionable age, the peculiar Jesuit stamp. Knowing very well why they were at work and what ends they should achieve, intolerant of opposition, intensely practical in all their work, and possessed of an indefatigable zeal in the accomplishment of their purpose, they gave Europe in general and northern continental Europe in particular a system of secondary schools and universities possessed of a high degree of effectiveness, which, combined with religious warfare and persecution, in time drove out or dwarfed all competing institutions in the countries they were able to control.

Jesuit school methods. The characteristic method of the schools was oral, with a consequent closeness of contact of teacher and pupils. This closeness of contact and sympathy was further retained by the system whereby all punishment was given by the official Corrector of the institution. Their method, like that of the modern German *Volkschule*, was distinctly a teaching and not a questioning method. The teacher planned and gave the instruction; the pupils received it. The memory was drilled; but little training of the judgment or understanding was given. Thoroughness, memory drills, and the disciplinary value of studies were foundation stones in the Jesuit's educational theory. Repetition, they said, was the mother of memory. Each day the work of the previous day was reviewed, and there were further reviews at the end of each week, month, and year.

To retain the interest of the pupils amid such a load of memorizing various school devices were resorted to, chief among which were prizes, ranks, emulations, rivals, and public disputations. The system of rivals, whereby each boy had an opponent seated opposite and constantly after him was one of the peculiar features of their schools. While the schools were said to have been made pleasant and attractive, the idea of the absolute authority of the Church which they represented pervaded them and repressed the development of that individuality which the court schools of the Italian Renaissance, the schools of the northern humanists, and the Calvinistic colleges had tried particularly to foster. This, however, is a criticism made from a modern point of view. That the school represented well the spirit of the times is indicated by their marked success as teaching institutions.

Training of the Jesuit teacher. The newest and the most distinguishing feature of the Jesuit educational scheme, as well as the most important, was the care with which they selected and the thoroughness with which they trained their teachers. To begin with, every Jesuit was a picked man, and of those who entered the Order only the best were selected for teaching. Each entered the Order for life, was vowed to celibacy, poverty, chastity, uprightness of life, and absolute obedience to the commands of the Order. The six-year inferior course had to be completed, which required that the boy be sixteen to eighteen years of age before he could take the preliminary steps toward joining the Order. Then a two-year novitiate, away from the world, followed. This was a trial of his real character, his weak points were noted, and his will and determination tested. Many were dismissed before the end of the novitiate. If retained and accepted, he took the preliminary vows and entered the philosophical course of study. On completing this he was from twenty-one to twenty-three years of age. He was now assigned to teach boys in the inferior classes of some college, and might remain there. If destined for higher work he taught in the inferior classes for two or three years, and then entered the theological course at some Jesuit university. This required four years for those headed for the ministry, and six for those who were being trained for professorships in the colleges. On completing this course the final vows were taken, at an age of from twenty-nine to thirty-two. The training to-day is still longer. To become a teacher in the inferior classes required training until twenty-one at least, and for college (secondary) classes training until at least twenty-nine. The training was in scholarship, religion, theology, and an apprenticeship in teaching, and was superior to that required for a teaching license in any Protestant country of Europe, or in the Catholic Church itself outside of the Jesuit Order.

With such carefully selected and well-educated teachers, themselves models of upright life in an age when priests and monks had been careless, it is not surprising that they wielded an influence wholly out of proportion to their numbers, and supplied Europe with its best secondary schools during the seventeenth and early eighteenth centuries. In the loyal Catholic countries they were virtually the first secondary schools outside of the monasteries and churches, and the real introduction of humanism into Spain, Portugal, and parts of France came with the establishment of the Jesuit humanistic colleges. For their schools they wrote new school books — the Protestant books, the most celebrated of which were those of Erasmus, Melanchthon, Sturm, and Lily, were not possible of use — and for a time they put new life into the humanistic type of education. Before the eighteenth century, however, their secondary schools had become as formal as had those in Protestant lands (**R.** 146), and their universities far more narrow and intolerant.

The Church and elementary education. As was stated on a preceding page, the countries which remained loyal to the Church experienced none of the Protestant feeling as to the necessity for universal education for individual salvation. In such lands the church system of education which had grown up during the Middle Ages remained undisturbed, and was expanded but slowly with the passage of time. The Church, never having made general provision for education, was not prepared for such work. Teachers were scarce, there was no theory of education except the religious theory, and few knew what to do or how to do it. Many churchmen, too, did not see the need for doing anything. Nevertheless the Church, spurred on by the new demands of a world fast becoming modern, and by the exhortations of the official representatives of the people, now began to make extra efforts, in the large cathedral cities, to remedy the deficiency of more than a thousand years.

The general effect of the Reformation, though, was to stimulate the Church to greater activity in elementary, as well as in secondary and higher education. In the sixteenth and seventeenth centuries we find a large number of decrees by church councils and exhortations by bishops urging the extension of the existing church system of education, so as to supply at least religious training to all the children of the faithful. As a result a number of teaching orders were organized, the aim of which was to assist the Church in providing elementary and religious education for the children of the laboring and artisan classes in the cities.

The Brothers of the Christian Schools. The largest and most influential of the teaching orders established for elementary education was the "Institute of the Brothers of the Christian Schools," founded by Father La Salle at Rouen, in 1684, and sanctioned by the King and Pope in 1724. As early as 1679 La Salle had begun a school at Rheims, and in 1684 he organized his disciples, prescribed a costume to be worn, and outlined the work of the brotherhood (**R. 182**). The object was to provide free elementary and religious instruction in the vernacular for the children of the working classes, and to do for elementary education what the Jesuits had done for secondary education. La Salle's *Conduct of Schools*, first published in 1720, was the *ratio studiorum* of his order. His work marks the real beginning of free primary instruction in the vernacular in France. In addition to elementary schools, a few of what we should call part-time continuation schools were organized for children engaged in commerce and industry. Realizing better than the Jesuits the need for well-trained rather than highly educated teachers for little children, and unable to supply members to meet the outside calls for schools, La Salle organized at Rheims, in 1685, what was probably the second normal school for training teachers in the world. Another was organized later at Paris. In addition to a good education of the type of the time and thorough grounding in religion, the student teachers learned to teach in practice schools, under the direction of experienced teachers.

The pupils in La Salle's schools were graded into classes, and the class method of instruction was introduced. The curriculum was unusually rich for a time when teaching methods and textbooks were but poorly developed, the needs for literary education small, and when children could not as yet be spared from work longer than the age of nine or ten. Children learned first to read, write, and spell French, and to do simple composition work in the vernacular. Those who mastered this easily were taught the Latin Psalter in addition. Much prominence was given to writing, the instruction being applied to the writing of bills, notes, receipts, and the like. Much free questioning was allowed in arithmetic and the Catechism, to insure perfect understanding of what was taught. Religious training was made the most prominent feature of the school, as was natural. A half-hour daily was given to the Catechism, mass was said daily, the crucifix was always on the wall, and two or three pupils were always to be found kneeling, telling their beads. The discipline, in contradistinction to the customary practice of the time, was mild, though all punishments were carefully prescribed by rule. The rule of silence in the school was rigidly enjoined, all speech was to be in a low tone of voice, and a code of signals replaced speech for many things.

Though the Order met with much opposition from both church and civil authorities, it made slow but steady headway. At the time of the death of La Salle, in 1719, thirty-five years after its foundation, the Order had one general normal school, four normal schools for training teachers, three practice schools, thirty-three primary schools, and one continuation school. The Order remained largely French, and at the time of its suppression, in 1792, had schools in 121 communities in France and 6 elsewhere, about 1000 brothers, and approximately 30,000 children in its schools. This was approximately 1 child in every 175 of school age of the population of France at that time. While relatively small in numbers, their schools represented the best attempt to provide elementary education in any Catholic country before well into the nineteenth century.

5. *General results of the Reformation on education*

Destruction and creation of schools. Any such general overturning of the established institutions and traditions of a thousand years as occurred at the time of the Protestant Revolts, with the accompanying bitter hatreds and religious strife, could not help but result in extensive destruction of established institutions. Monasteries, churches, and schools alike suffered, and it required time to replace them. Even though they had been neglectful of their functions, inadequate in number, and unsuited to the needs of a world fast becoming modern, they had nevertheless answered partially the need of the times. In all the countries where revolts took place these institutions suffered more or less, but in England probably most of all. The old schools which were not destroyed were transformed into Protestant schools, the grammar schools to train scholars and leaders, and the parish schools into Protestant elementary schools to teach reading and the Catechism, but the number of the latter, in all Protestant lands, was very far short of the number needed to carry out the Protestant religious theory. This, as we have seen, proposed to extend the elements of an education to large and entirely new classes of people who never before in the history of the world had had such advantages. Out of the Protestant religious conception that all should be educated the popular elementary school of modern times has been evolved. The evolution, though, was slow, and long periods of time have been required for its accomplishment.

In place of the schools destroyed, or the teachers driven out if no destruction took place, the reformers made an earnest effort to create new schools and supply teachers. This, though, required time, especially as there was as yet in the world no body of vernacular teachers, no institutions in which such could be trained, no theory as to education except the religious, no supply of educated men or women from which to draw, no theory of state support and control, and no source of taxation from which to derive a steady flow of funds. Throughout the long Middle Ages the Church had supplied gratuitous or nearly gratuitous instruction. This it could do, to the limited number whom it taught, from the proceeds of its age-old endowments and educational foundations. In the process of transformation from a Catholic to a Protestant State, and especially during the more than a century of turmoil and religious strife which followed the rupture of the old relations, many of the old endowments were lost or were diverted from their original purposes. As the Protestant reformers were supported generally by the ruling princes, many of these tried to remedy the deficiency by ordering schools established. The landed nobility though, unused to providing education for their villein tenants and serfs, were averse to supplying the deficiency by any form of general taxation. Nor were the rising merchant classes in the cities any more anxious to pay taxes to provide for artisans and servants what had for ages been a gratuity or not furnished at all.

***No real demand for* elementary schools.** The creation of a largely new type of schools, and in sufficient numbers to meet the needs of large classes of people who before had never shared in the advantages of education, in consequence proved to be a work of centuries. The century of warfare which followed the reformation movement more or less exhausted all Europe, while the Thirty Years' War which formed its culmination left the German States, where the largest early educational progress had been made, a ruin. In consequence there was for long little money for school support, and religious interest and church tithes had to be depended on almost entirely for the establishment and support of schools. Out of the parish sextons or clerks a supply of vernacular teachers had to be evolved, a system of school organization and supervision worked out and added to the duties of the minister, and the feeling of need for education awakened sufficiently to make people willing to support schools. In consequence what Luther and Calvin declared at the beginning of the sixteenth century to be a necessity for the State and the common right of all, it took until well into the nineteenth century actually to create and make a reality.

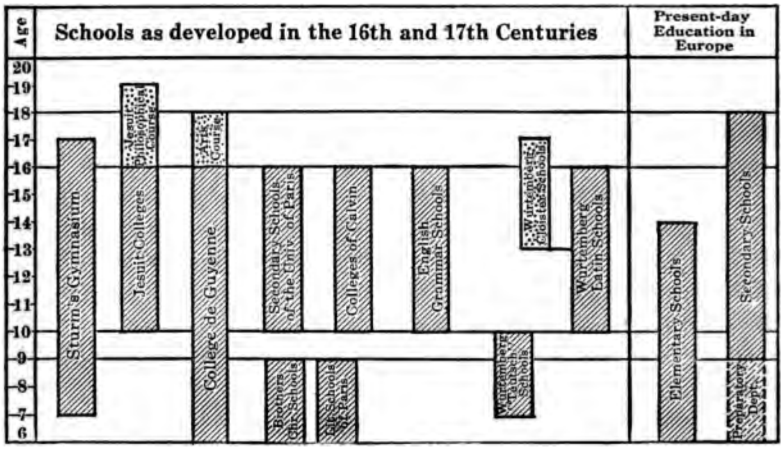

FIG. 39. TENDENCIES IN EDUCATIONAL DEVELOPMENT IN EUROPE 1500 to 1700

The great demand of the time, too, was not so much for the education of the masses, however desirable or even necessary this might be from the standpoint of Protestant religious theory, but *for the training* of leaders for the new religious and social order *which the Revival* of Learning, the rise of modern nationalities, and the Reformation movements had brought into being. For this secondary schools for boys, largely Latin in type, were demanded rather than elementary vernacular schools for both sexes. We accordingly find the great creations of the period were secondary schools.

Lines of future development established. Still more, certain lines of future development now became clearly established. The drawing given here will help to make this evident. It will be seen from this that not only was the secondary school still the dominant type, though elementary schools began for the first time to be considered as important also, but that the secondary schools were wholly independent of the elementary schools which now began to be created. The elementary schools were in the vernacular and for the masses; the secondary schools were in the Latin tongue and for the training of the scholarly leaders. Between these two schools, so different in type and in clientèle, there was little in common. This difference was further emphasized with time. The elementary schools later on added subjects of use to the common people, while the secondary schools added subjects of use for scholarly preparation or for university entrance. The secondary schools also frequently provided preparatory schools for their particular classes of children. As a result, all through Europe two school systems — an elementary-school system for the masses, and a secondary-school system for the classes — exist to-day side by side. We in America did not develop such a class school system, though we started that way. This was because the conception of education we finally developed was a product of a new democratic spirit, as will be explained later on.

QUESTIONS FOR DISCUSSION

1. Compare the attention to careful religious instruction in the secondary schools provided by the Lutherans, Calvinists, and English. What analogous instruction do we provide in the American high schools? Is it as thorough or as well done?
2. Compare the scope and ideals of the educational system provided by the Calvinists with the same for the Lutherans and Anglicans.
3. Just what kind of a school system did Knox propose (1560) for Scotland?
4. Show how the educational program of the Jesuits reveals Ignatius Loyola as a man of vision.
5. Viewed from the purposes the Order had in mind, was it warranted in neglecting the education of the masses?
6. Does the success of the Order show the importance to society of finding and educating the future leader? Can all men be trained for leadership?
7. What does the statement that the Jesuits were "too practical to make

many changes," but had "a keen eye for what was best" in the work of others, indicate as to the nature of school administration and educational progress?

8. Indicate the advantages which the Jesuits had in their teachers and teaching-aim over us of to-day. How could we develop an aim as clearly defined and potent as theirs? Could we select teachers with such care? How?
9. Compare the religious and educational propaganda of the Jesuits with the recent political propaganda of the Germans.
10. Compare present American standards for teacher-training for elementary and secondary teaching with those required by the Jesuits: — (*a*) as to length of preparation; (*b*) as to nature and scope of preparation.
11. How do you explain the introduction of sewing into the elementary vernacular Catholic schools for girls, so long before handiwork for boys was thought of?
12. In schools so formally organized as those of La Salle, how do you explain the freedom allowed in questioning on arithmetic and the Catechism?
13. Why should La Salle's work have been so opposed by both Church and civil authorities?
14. Why must the education of leaders always precede the education of the masses?
15. Explain how European countries came naturally to have two largely independent school systems — a secondary school for leaders and an elementary school for the masses — whereas we have only one continuous system.
16. Explain why modern state systems of education developed first in the German States, and why England and the Catholic nations of Europe were so long in developing state school systems.

SELECTED READINGS

In the accompanying *Book of Readings* the following selections are reproduced:

175. Woodward: Course of Study at the College of Geneva.
176. Synod of Dort: Scheme of Christian Education adopted.
177. Kilpatrick: Work of the Dutch in developing Schools.
178. Kilpatrick: Character of the Dutch Schools of 1650.
179. Statutes: The Scotch School Law of 1646.
180. Pachtler: The *Ratio Studiorum* of the Jesuits.
181. Gérard: The Dominant Religious Purpose in the Education of French Girls.
182. La Salle: Rules for the "Brothers of the Christian Schools."

SUPPLEMENTARY REFERENCES

Baird, C. W. *History of the Rise of the Huguenots of France.*
Baird, C. W. *Huguenot Emigration to America.*
Grant, Jas. *History of the Burgh Schools of Scotland.*
Hughes, Thos. *Loyola, and the Educational System of the Jesuits.*
Kilpatrick, Wm. H. *The Dutch Schools of New Netherlands and Colonial New York.*
Laurie, S. S. *History of Educational Opinion since the Renaissance.*
Ravelet, A. *Blessed J. B. de la Salle.*
Schwickerath, R. *Jesuit Education; its History and Principles in the Light of Modern Educational Problems.*
Woodward, W. H. *Education during the Renaissance.*

CHAPTER XV

EDUCATIONAL RESULTS OF THE PROTESTANT REVOLTS

III. THE REFORMATION AND AMERICAN EDUCATION

The Protestant settlement of America. Columbus had discovered the new world just twenty-five years before Luther nailed his theses to the church door at Wittenberg, and by the time the northern continent had been roughly explored and was ready for settlement, Europe was in the midst of a century of warfare in a vain attempt to extirpate the Protestant heresy. By the time that the futility of fire and sword as means for religious conversion had finally dawned upon Christian Europe and found expression in the Peace of Westphalia (1648), which closed the terrible Thirty Years' War (p. 160), the first permanent settlements in a number of the American colonies had been made. These settlements, and the beginnings of education in America, are so closely tied up with the Protestant Revolts in Europe that a chapter on the beginnings of American education belongs here as still another phase of the educational results of the Protestant Revolts.

Practically all the early settlers in America came from among the peoples and from those lands which had embraced some form of the Protestant faith, and many of them came to America to found new homes and establish their churches in the wilderness, because here they could enjoy a religious freedom impossible in their old home-lands. This was especially true of the French Huguenots, many of whom, after the revocation of the Edict of Nantes (1685), fled to America and settled along the coast of the Carolinas; the Calvinistic Dutch and Walloons, who settled in and about New Amsterdam; the Scotch and Scotch-Irish Presbyterians, who settled in New Jersey, and later extended along the Allegheny Mountain ridges into all the southern colonies; the English Quakers about Philadelphia, who came under the leadership of William Penn, and a few English Baptists and Methodists in eastern Pennsylvania; the Swedish Lutherans, along the Delaware; the German Lutherans, Moravians, Mennonites, Dunkers, and Reformed-Church Germans, who settled in large numbers in the mountain valleys of Pennsylvania; and the Calvinistic dissenters from the English National Church, known as Puritans, who settled the New England colonies, and who,

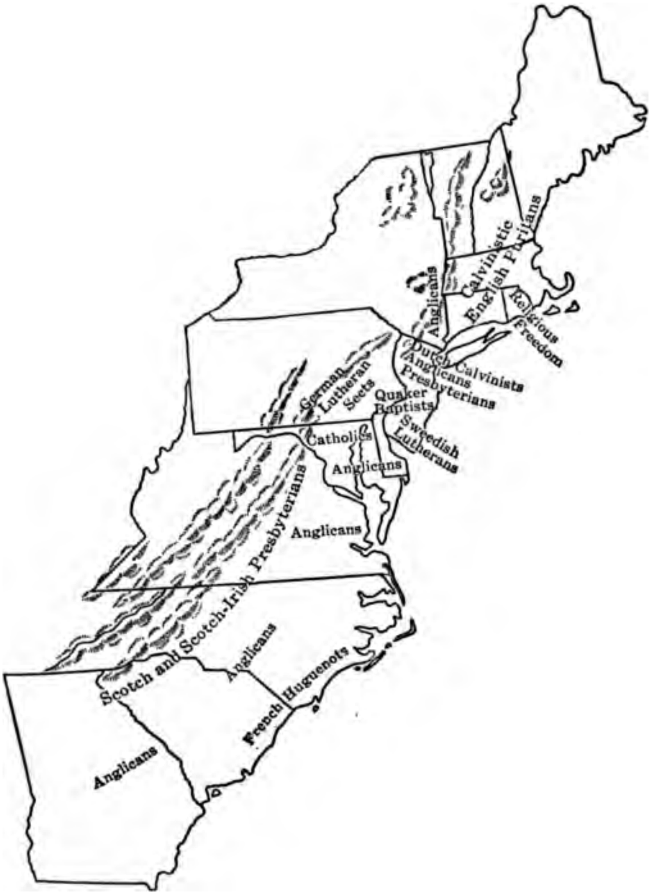

FIG. 40. MAP SHOWING THE RELIGIOUS SETTLEMENTS IN AMERICA

more than any others, gave direction to the future development of education in the American States. Practically all of these early religious groups came to America in little congregations, bringing their ministers with them. Each set up, in the colony in which it settled, what were virtually little religious republics, that through them they might the better perpetuate the religious principles for which they had left the land of their birth. Education of the young for membership in the Church, and the perpetuation of a learned ministry for the congregations, from the first elicited the serious attention of these pioneer settlers.

Englishmen who were adherents of the English national faith (Anglicans) also settled in Virginia and the other southern colonies, and later in New York and New Jersey, while Maryland was founded as the only Catholic colony, in what is now the United States, by a group of persecuted English Catholics who obtained a charter from Charles I, in 1632. These settlements are shown on the map on the preceding page. As a result of these settlements there was laid, during the early colonial period of American history, the foundation of those type attitudes toward education which subsequently so materially shaped the educational development of the different American States during the early part of our national history.

The Puritans in New England. Of all those who came to America during this early period, the Calvinistic Puritans who settled the New England colonies contributed most that was valuable to the future educational development of America, and because of this will be considered first.

The original reformation in England, as was stated in chapters XII and XIII, had been much more nominal than real. The English Bible and the English Prayer-Book had been issued to the churches (**R. 170**), and the King instead of the Pope had been declared by the Act of Supremacy (**R. 153**) to be the head of the English National Church. The same priests, though, had continued in the churches under the new régime, and the church service had not greatly changed aside from its transformation from Latin into English. Neither the Church as an organization nor its members experienced any great religious reformation. Not all Englishmen, though, took the change in allegiance so lightly (**R. 183**), and in consequence there came to be a gradually increasing number who desired a more fundamental reform of the English Church. By 1600 the demand for Church reform had become very insistent, and the question of Church purification (whence the name "Puritans") had become a burning question in England.

The English Puritans, moreover, were of two classes. One was a moderate but influential "low-church" group within the "high" *State Church, possessed* of no desire to separate Church and

State, but earnestly insistent on a simplification of the Church ceremonial, the elimination of a number of the vestiges of the old Romish-Church ritual, and particularly the introduction of more preaching into the service. The other class constituted a much more radical group, and had become deeply imbued with Calvinistic thinking. This group gradually came into open opposition to any State Church, stood for the local independence of the different churches or congregations, and desired the complete elimination of all vestiges of the Romish faith from the church services. They became known as Independents, or Separatists, and formed the germs of the later Congregational groups of early New England. Both Elizabeth (1558–1603) and James I (1603–25) savagely persecuted this more radical group, and many of their congregations were forced to flee from England to obtain personal safety and to enjoy religious liberty (R. 184). One of these fugitive congregations, from Scrooby, in north-central England, after living for several years at Leyden, in Holland, finally set sail for America, landed on Plymouth Rock, in 1620, and began the settlement of that "bleak and stormy coast." Other congregations soon followed, it having been estimated that twenty thousand English Puritans migrated to the New England wilderness before 1640. These represented a fairly well-to-do type of middle-class Englishmen, practically all of whom had had good educational advantages at home.

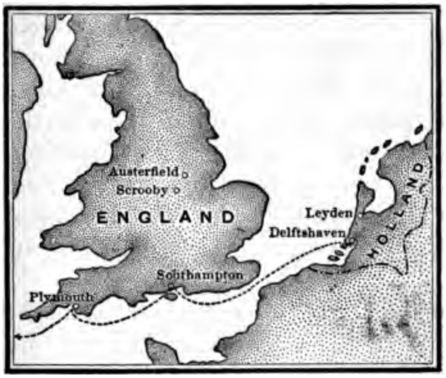

FIG. 41. HOMES OF THE PILGRIMS, AND THEIR ROUTE TO AMERICA

Settling along the coast in little groups or congregations, they at once set up a combined civil and religious form of government, modeled in a way after Calvin's City-State at Geneva, and which became known as a New England town. In time the southern portion of the coast of New England was dotted with little self-governing settlements of those who had come to America to obtain for themselves that religious freedom which had been denied them at home. These settlements were loosely bound together in a colony federation, in which each town was represented in a General Court, or legislature.

Beginnings of schools in New England. Having come to America to secure religious freedom, it was but natural that the perpetuation of their particular faith by means of education should have been one of the first matters to engage their attention, after the building of their homes and the setting up of the civil government (**R. 185**). Being deeply imbued with Calvinistic ideas as to government and religion, they desired to found here a religious commonwealth, somewhat after the model of Geneva (p. 159), or Scotland (p. 178), or the Dutch provinces (p. 177), the corner-stones of which should be religion and education.

At first, English precedents were followed. Home instruction, which was quite common in England among the Puritans, was naturally much employed to teach the children to read the Bible and to train them to participate in both the family and the congregational worship. After 1647, town elementary schools under a master, and later the English "dame schools" (chapter XVIII), were established to provide this rudimentary instruction. The English apprentice system was also established (**R. 201**), and the masters of apprentices gave similar instruction to boys entrusted to their care. The town religious governments, under which all the little congregations organized themselves, much as the little religious parishes had been organized in old England, also began the voluntary establishment of town grammar schools, as a few towns in England had done (**R. 143**) before the Puritans migrated. The "Latin School" at Boston dates from 1635, and has had a continuous existence since that time. The grammar school at Charlestown dates from 1636, that at Ipswich from the same year, and the school at Salem from 1637.

Founding of Harvard College. In addition to establishing Latin grammar schools, a college was founded, in 1636, by the General Court (legislature) of the Massachusetts Bay Colony, to perpetuate learning and insure an educated ministry (**R. 185**) to the churches after "our present ministers shall lie in the dust." This new college, located at Newtowne, was modeled after Emmanuel College at Cambridge, an English Puritan college in which many of the early New England colonists had studied, and in loving memory of which they rechristened Newtowne as Cambridge. In 1639 the college was christened Harvard College, after a grad uate of Emmanuel College, Cambridge, by the name of John Harvard, who died in Charlestown, a year after his arrival in the colony, and who left the college his library of two hundred and sixty volumes and half his property, about £850.

The instruction in the new college was a combination of the arts and theological instruction given in a mediæval university, though at Harvard the President, Master Dunster (**R. 185**), did all the teaching. For the first fifty years at Harvard this continued to be true, the attendance during that time seldom exceeding twenty. The entrance requirements for the college (**R. 186 a**) call for the completion of a typical English Latin grammar-school education; the rules and precepts for the government of the college (**R. 186 b**) reveal the deep religious motive; and the schedule of studies (**R. 186 c**) and the requirements for degrees (**R. 186 d**) both show that the instruction was true to the European type. In the charter for the college, granted by the colonial legislature in 1650 (**R. 187 a**), we find exemptions and conditions which remind one strongly of the older European foundations. A century later Brown College, in Rhode Island, was granted even more extensive exemptions (**R. 187 b**).

The first colonial legislation: the Law of 1642. We thus see manifested early in New England the deep Puritan-Calvinistic zeal for learning as a bulwark of Church and State. We also see the establishment in the wilderness of New England of a typical English educational system — that is, private instruction in reading and religion by the parents in the home and by the masters of apprentices, and later by a town schoolmaster; the Latin grammar school in the larger towns, to prepare boys for the college of the colony; and an English-type college to prepare them for the ministry. As in England, too, all was clearly subordinate to the Church. Still further, as in England also, the system was voluntary, the deep religious interest which had brought the congregations to America being depended upon to insure for all the necessary education and religious training.

It early became evident, though, that these voluntary efforts on the part of the people and the towns would not be sufficient to insure that general education which was required by the Puritan religious theory. Under the hard pioneer conditions, and the suffering which ensued, many parents and masters of apprentices *evidently proved* neglectful of their educational duties. Accord*ingly the Church* appealed to its servant, the State, as represented in the colonial legislature (General Court) to assist it in compelling parents and masters to observe their religious obligations. The result was the famous Massachusetts Law of 1642 (R. 190), which directed "the chosen men" (Selectmen; Councilmen) of each town to ascertain, from time to time, if the parents and masters were attending to their educational duties; if the children were being trained "in learning and labor and other employments . . . profitable to the Commonwealth"; and if children were being taught "to read and understand the principles of religion and the capital laws of the country," and empowered them to impose fines on "those who refuse to render such accounts to them when required."

The Law of 1642 is remarkable in that, for the first time in the English-speaking world, a legislative body representing the State ordered that all children should be taught to read. This law the Selectmen, or the courts if they failed to do so, were ordered to enforce, and the courts usually looked after their duties in the matter (R. 192).

The Law of 1647. The Law of 1642 did not, however, establish schools, or direct the employment of schoolmasters. The provision of education, after the English fashion, was still left with the homes. After a trial of five years, the results of which were not satisfactory, the General Court enacted another law by means of which it has been asserted that "the Puritan government of Massachusetts rendered probably its greatest service to the future."

After recounting in a preamble (R. 191) that it had in the past been "one cheife proiect of y^{t} ould deluder, Satan, to keepe men from the knowledge of y^{e} Scriptures, . . . by keeping y^{m} in an unknowne tongue," so now "by pswading from y^{e} use of tongues," and "obscuring y^{e} true sence & meaning of y^{e} originall" by "false glosses of saint-seeming deceivers," learning was in danger of being "buried in y^{e} grave of o^{r} fath^{rs} in y^{e} church and comonwealth"; the Court ordered:

1. That every town having fifty householders should at once appoint a teacher of reading and writing, and provide for his wages in such manner as the town might determine; and
2. That every town having one hundred householders must provide a grammar school to fit youths for the university, under a penalty of £5 (afterwards increased to £20) for failure to do so.

This law represents a distinct step in advance over the Law of

1642, and for this there are no English precedents. It was not until the latter part of the nineteenth century that England took such a step. The precedents for the compulsory establishment of schools lie rather in the practices of the different German States (p. 167), the actions of the Dutch synods (R. 176) and provinces (p. 177), the Acts of the Scottish parliament of 1633 and 1646 (p. 178; R. 179), and the general Calvinistic principle that education was an important function of a religious State.

Principles established. The State here, acting again as the servant of the Church, enacted a law and fixed a tradition which prevailed and grew in strength and effectiveness after State and Church had parted company. Not only was a school system ordered established — elementary for all towns and children, and secondary for youths in the larger towns — but, for the first time among English-speaking people, there was an assertion of the right of the State to require communities to establish and maintain schools, under penalty if they refused to do so. It can be safely asserted, in the light of later developments, that the two laws of 1642 and 1647 represent the foundations upon which our American state public-school systems have been built.

Influence on other New England colonies. Connecticut Colony, in its Law of 1650 establishing a school system, combined the spirit of the Massachusetts Law of 1642, though stated in different words (R. 193); and the Law of 1647, stated word for word. New Haven Colony, in 1655, ordered that children and apprentices should be taught to read, as had been done in Massachusetts, in 1642, but on the union of New Haven and Connecticut Colonies, in 1665, the Connecticut Code became the law for the united colonies. In 1702 a college was founded (Yale) and finally located at New Haven, to offer preparation for the ministry in the Connecticut

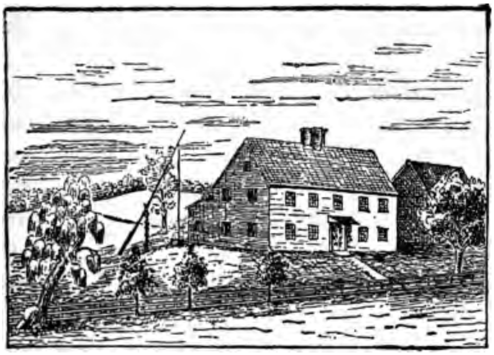

FIG. 42. WHERE YALE COLLEGE WAS FOUNDED
The home of the Reverend Samuel Russell, at Branford, Conn. The first meeting to organize the college was held there, in September, 1701

colony, as had been done earlier in Massachusetts, and Latin grammar schools were founded in the Connecticut towns to prepare for the new college, as also had been done earlier in Massachusetts. The rules and regulations for the grammar school at New Haven (**R. 189**) reveal the purpose and describe the instruction provided in one of the earliest and best of these.

Plymouth Colony, in 1658 and again in 1663, proposed to the towns that they "sett vp" a schoolmaster "to traine vp children to reading and writing" (**R. 194 a**). In 1672 the towns were asked to aid Harvard College by gifts (**R. 194 b**). In 1673–74 the income from the Cape Cod fisheries was set aside for the support of a (grammar) school (**R. 194 c**). Finally, in 1677, all towns having over fifty families and maintaining a grammar school were ordered aided from the fishery proceeds (**R. 194 d**).

The Massachusetts laws also applied to Maine, New Hampshire, and Vermont, as these were then a part of Massachusetts Colony. When New Hampshire separated off, in 1680, the Massachusetts Laws of 1642 and 1647 were continued in force. In Maine and Vermont there were so few settlers, until near the beginning of our national life, that the influence of the Massachusetts legislation on these States was negligible until a later period.

Only in Rhode Island and Providence Plantations, of all the New England colonies, did the Massachusetts legislation fail to exert a deep influence. Settled as these two had been by refugees from New England, and organized on a basis of hospitality to all who suffered from religious oppression elsewhere, the religious stimulus to the founding of schools naturally was lacking. As the religious basis for education was as yet the only basis, the first development of schools in Rhode Island awaited the humanitarian and economic influences which did not become operative until early in the nineteenth century.

Outside of the New England colonies, the appeal to the State as the servant of the Church was seldom made during the early colonial period, the churches handling the educational problem in their own way. As a result the beginnings of State oversight and control were left to New England. In the central colonies a series of parochial-school systems came to prevail, while in Episcopalian Virginia and the other colonies to the south the no-business-of-the-State attitude assumed toward education by the mother *country was copied.*

The church schools of New York. New Netherland, as New York Colony was called before the English occupation, was settled by the Dutch West India Company, and some dozen villages about New York and up the Hudson had been founded by the time it passed to the control of the English, in 1664. In these the Dutch established typical home-land public parochial schools, under the control of the Reformed Dutch Church. The schoolmaster was usually the reader and precentor in the church as well (**R. 195**), and often acted, as in Holland, as sexton besides. Girls attended on equal terms with boys, but sat apart and recited in separate classes. The instruction consisted of reading and writing Dutch, sometimes a little arithmetic, the Dutch Catechism, the reading of a few religious books, and certain prayers. The rules (1661) for a schoolmaster in New Amsterdam (**R. 196**), and the contract with a Dutch schoolmaster in Flatbush (**R. 195**), dating from 1682, reveal the type of schools and school conditions provided. All except the children of the poor paid fees to the schoolmaster. He was licensed by the Dutch church authorities. As the Dutch had not come to America because of persecution, and were in no way out of sympathy with religious conditions in the home-land, the schools they developed here were typical of the Dutch European parochial schools of the time (**R. 178**). A *trivial* (Latin) school was also established in New York, in 1652.

The parochial schools of Pennsylvania. Pennsylvania was settled by Quakers, Baptists, Methodists, Presbyterians, German Lutherans, Moravians, Mennonites, and members of the German Reformed Church, all of whom came to America to secure greater religious liberty and had been attracted to this colony by the freedom of religious worship which Penn had provided for there. All these were Protestant sects, all believed in the necessity of learning to read the Bible as a means to personal salvation, and all made efforts looking toward the establishment of schools as a part of their church organization. Unlike New England, though, no sect was in a majority; church control for each denomination was considered as most satisfactory; and no appeal was made to the State to have it assist the churches in the enforcement of their religious purposes. The clergymen were usually the teachers in the parochial schools established, while private pay schools were opened in the villages and towns. These were taught in English, *German, or the* Moravian tongue (Czech), according to the original language of the different immigrants. The Quakers seem to have taken particular interest in schools (R. 199), a Quaker school in Philadelphia (R. 198) having been established the year the city was founded. Girls were educated as well as boys, and the emphasis was placed on reading, writing, counting, and religion, rather than upon any higher form of training.

The result was the development in this colony of a policy of depending on church and private effort, and the provision of education, aside from certain rudimentary and religious instruction, was left largely for those who could afford to pay for the privilege. Charitable education was extended to but a few, for a short time, while, under the freedom allowed, many communities made but indifferent provisions or suffered their schools to lapse. Under the primitive conditions of the time the interest even in religious education often declined almost to the vanishing point.

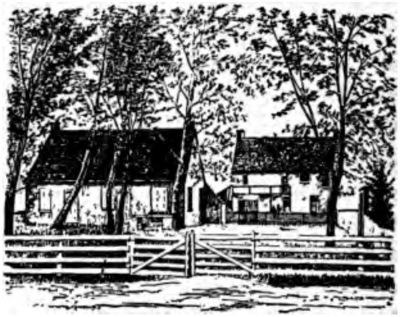

FIG. 43. AN OLD QUAKER MEETING-HOUSE AND SCHOOL AT LAMPETER, PENNSYLVANIA
(From an old drawing)

Virginia and the southern type. Almost all the conditions attending the settlement of Virginia were in contrast to those of the New England colonies. The early settlers were from the same class of English yeomen and country squires, but with the important difference that whereas the New England settlers were Dissenters from the Church of England and had come to America to obtain freedom in religious worship, the settlers in Virginia were adherents of the National Church and had come to America for gain. The marked differences in climate and possible crops led to the large plantation type of settlement, instead of the compact little New England town; the introduction of large numbers of "indentured white servants," and later negro slaves, led to the development of classes in society instead of to the New England type of democracy; and the lack of a strong religious motive for education naturally led to the adoption of the customary English practices instead of to the development of colonial schools. The tutor in the home, education in small private pay schools, or education in the mother country were the prevailing methods adopted among the well-to-do planters, while the poorer classes were left with only such advantages as apprenticeship training or charity schools might provide. Throughout the entire colonial period Virginia remained most like the mother country in spirit and practice, and stands among the colonies as the clearest example of the English attitude toward school support and control. As in the mother country, education was considered to be no business of the State. Rhode Island, New York, New Jersey, Delaware, and the Carolinas followed the English attitude, much after the fashion of Virginia. During the entire colonial period the indifference of the mother country to general education was steadily reflected in Virginia and in the colonies which were essentially Anglican in religion, and followed the English example.

Type plans represented by 1750. The seventeenth century thus witnessed the transplanting of European ideas as to government, religion, and education to the new American colonies, and by the eighteenth century we find three clearly marked types of educational practice or conception as to educational responsibility established on American soil.

The first was the strong Calvinistic conception of a religious State, supporting a system of common vernacular schools, higher Latin schools, and a college, for both religious and civic ends. This type dominated New England, and is best represented by Massachusetts. From New England this attitude was carried westward by the migrations of New England people, and deeply influenced the educational development of all States to which the New Englander went in any large numbers. This was the educational contribution of Calvinism to America. Out of it our state school systems of to-day, by the separation of Church and State, have been evolved.

The second was the parochial-school conception of the Dutch, Moravians, Mennonites, German Lutherans, German Reformed Church, Quakers, Presbyterians, Baptists, and Catholics. This type is best represented by Protestant Pennsylvania and Catholic Maryland. It stood for church control of all educational efforts, resented state interference, was dominated only by church purposes, and in time came to be a serious obstacle in the way of rational state school organization and control.

The third type, into which the second type tended to fuse, conceived of public education, aside from collegiate education, as intended chiefly for orphans and the children of the poor, and as a charity which the State was under little or no obligation to assist in supporting. All children of the upper and middle classes in society attended private or church schools, or were taught by tutors in their homes, and for such instruction paid a proper tuition fee. Paupers and orphans, in limited numbers and for a limited time, might be provided with some form of useful education at the expense of either Church or State. This type is best represented by Anglican Virginia, which typified well the *laissez-faire* policy which dominated England from the time of the Protestant Reformation until the latter half of the nineteenth century.

These three types of attitude toward the provision of education became fixed American types, and each deeply influenced subsequent American educational development, as we shall point out in a later chapter.

Dominance of the religious motive. The seventeenth century was essentially a period of the transplanting, almost unchanged in form, of the characteristic European institutions, manners, religious attitudes, and forms of government to American shores. Each sect or nationality on arriving set up in the new land the characteristic forms of church and school and social observances known in the old home-land. Dutch, Germans, English, Scotch, Calvinists, Lutherans, Anglicans, Presbyterians — reproduced in the American colonies the main type of schools existing at the time of their migration in the mother land from which they came. They were also dominated by the same deep religious purpose.

The dominance of this religious purpose in all instruction is well illustrated by the great beginning-school book of the time, *The New England Primer*. A digest of the contents of this, with a few pages reproduced, is given in **R. 202.** This book, from which all children learned to read, was used by Dissenters and Lutherans alike in the American colonies. This book Ford well characterizes in the following words:

> As one glances over what may truly be called "The Little Bible of New England," and reads its stern lessons, the Puritan mood is caught with absolute faithfulness. Here was no easy road to knowledge and salvation; but with prose as bare of beauty as the whitewash of their churches, with poetry as rough and stern as their storm-torn coast, with pictures as crude and unfinished as their own glacial-smoothed boulders, between stiff oak covers which symbolized the contents, the children were *tutored, until,* from being unregenerate, and as Jonathan *Edwards said, "young* vipers, and infinitely more hateful than vipers"

to God, they attained that happy state when, as expressed by Judge Sewell's child, they were afraid that they "should goe to hell," and were "stirred up dreadfully to seek God." God was made sterner and more cruel than any living judge, that all might be brought to realize how slight a chance even the least erring had of escaping eternal damnation.

One learned to read chiefly that one might be able to read the Catechism and the Bible, and to know the will of the Heavenly Father. There was scarcely any other purpose in the maintenance of elementary schools. In the grammar schools and the colleges students were "instructed to consider well the main end of life and studies." These institutions existed mainly to insure a supply of learned ministers for service in Church and State. Such studies as history, geography, science, music, drawing, secular literature, and organized play were unknown. Children were constantly surrounded, week days and Sundays, by the somber Calvinistic religious atmosphere in New England, and by the careful religious oversight of the pastors and elders in the colonies where the parochial-school system was the ruling plan for education. Schoolmasters were required to "catechise their scholars in the principles of the Christian religion," and it was made "a chief part of the schoolmaster's religious care to commend his scholars and his labors amongst them unto God by prayer morning and evening, taking care that his scholars do reverently attend during the same." Religious matter constituted the only reading matter, outside the instruction in Latin in the grammar schools. The Catechism was taught, and the Bible was read and expounded. Church attendance was required, and grammar-school pupils were obliged to report each week on the Sunday sermon. This insistence on the religious element was more prominent in Calvinistic New England than in the colonies to the south, but everywhere the religious purpose was dominant. The church parochial and charity schools were essentially schools for instilling the church practices and beliefs of the church maintaining them. This state of affairs continued until well toward the beginning of the nineteenth century.

QUESTIONS FOR DISCUSSION

1. Compare the conservative and radical groups in the English purification movement with the conservative and radical groups, as typified by Erasmus and Luther, at the time of the Reformation.
2. Show how, for each group, the schools established were merely home-

land foreign-type religious schools, with nothing distinctively American about them.

3. Show why such copying of home-land types, even to the Latin grammar school, was perfectly natural.
4. The provision of the Law of 1642 requiring instruction in "the capital laws of the country" was new. How do you explain this addition to mother-land practices?
5. Show why the Law of 1642 was Calvinistic rather than Anglican in its origin.
6. Explain the meaning of the preamble to the Law of 1647.
7. Show how the Law of 1647 must go back for precedents to German, Dutch, and Scotch sources.
8. Show also that the Law of 1647, as well as modern state school laws, is neither paternalistic nor socialistic in essential purpose.
9. Show that, though the mixture of religious sects in Pennsylvania made colonial legislation difficult, still it would have been possible to have enforced the Massachusetts Law of 1642, or the Pennsylvania laws of 1683 or 1693, in the colony. How do you explain the opposition and failure to do so?
10. Show how the charity schools for the poor, and church missionary-society schools, were the natural outcome of the English attitude toward elementary education.
11. Which of the three type plans in the American colonies by 1750 most influenced educational development in your State?
12. State the important contribution of Calvinism to our new-world life.
13. Explain the indifference of the Anglican Church to general education during the whole of our colonial period.
14. Explain what is meant by "The Puritan Church appealed to its servant, the State," etc.

SELECTED READINGS

In the accompanying *Book of Readings* the following selections are reproduced:

183. Nichols: The Puritan Attitude.
184. Gov. Bradford: The Puritans leave England.
185. First Fruits: The Founding of Harvard College.
186. First Fruits: The First Rules for Harvard College.
    (*a*) Entrance Requirements.
    (*b*) Rules and Precepts.
    (*c*) Time and Order of Studies.
    (*d*) Requirements for Degrees.
187. College Charters: Extracts from, showing Privileges.
    (*a*) Harvard College, 1650.
    (*b*) Brown College, 1764.
188. Dillaway: Founding of the Free School at Roxburie.
189. Baird: Rules and Regulations for Hopkins Grammar School.
190. Statutes: The Massachusetts Law of 1642.
191. Statutes: The Massachusetts Law of 1647.
192. Court Records: Presentment of Topsfield for Violating the Law of 1642.
193. Statutes: The Connecticut Law of 1650.
194. Statutes: Plymouth Colony Legislation.
195. Flatbush: *Contract* with a Dutch Schoolmaster.
196. *New Amsterdam:* Rules for a Schoolmaster in.

197. Statutes: The Pennsylvania Law of 1683.
198. Minutes of Council: The First School in Philadelphia.
199. Murray: Early Quaker Injunctions regarding Schools.
200. Statutes: Apprenticeship Laws in the Southern Colonies.
  (*a*) Virginia Statutes.
  (*b*) North Carolina Court Records.
201. Stiles: A New England Indenture of Apprenticeship.
202. The New England Primer: Description and Digest.

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Brown, S. W. *The Secularization of American Education.*
Cheyney, Edw. P. *European Background of American Education.*
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*Eggleston, Edw. *The Transit of Civilization.*
Fisk, C. R. "The English Parish and Education at the Beginning of American Civilization"; in *School Review*, vol. 23, pp. 433–49. (September, 1915.)
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*Heatwole, C. J. *A History of Education in Virginia.*
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*Kilpatrick, Wm. H. *The Dutch Schools of New Netherlands and Colonial New York.*
*Knight, E. W. *Public School Education in North Carolina.*
*Martin, Geo. H. *Evolution of the Massachusetts Public School System.*
Seybolt, R. F. *Apprenticeship and Apprentice Education in Colonial New York and New England.*
*Small, W. H. "The New England Grammar School"; in *School Review*, vol. 10, pp. 513–31. (September, 1902.)
Small, W. H. *Early New England Schools.*

CHAPTER XVI

THE RISE OF SCIENTIFIC INQUIRY

New attitudes after the eleventh century. From the beginning of the twelfth century onward, as we have already noted, there had been a slow but gradual change in the character of human thinking, and a slow but certain disintegration of the Mediæval System, with its repressive attitude toward all independent thinking. Many different influences and movements had contributed to this change, all of which had tended to transform the mediæval man and change his ways of thinking. New objects of interest slowly came to the front, and new standards of judgment gradually were applied. In consequence the mediæval man, with his feeling of personal insignificance and lack of self-confidence, came to be replaced by a small but increasing number of men who were conscious of their powers, possessed a new self-confidence, and realized new possibilities of intellectual accomplishment.

The Revival of Learning, first in Italy and then elsewhere in western Europe, was the natural consequence of this awakening of the modern spirit, and in the careful work done by the humanistic scholars of the Italian Renaissance in collecting, comparing, questioning, inferring, criticizing, and editing the texts, and in reconstructing the ancient life and history, we see the beginnings of the modern scientific spirit. It was this same critical, questioning spirit which, when applied later to geographical knowledge, led to the discovery of America and the circumnavigation of the globe; which, when applied to matters of Christian faith, brought on the Protestant Revolts; which, when applied to the problems of the universe, revealed the many wonderful fields of modern science; and which, when applied to government, led to a questioning of the divine right of kings and the rise of constitutional government. The awakening of scientific inquiry and the scientific spirit, and the attempt of a few thinkers to apply the new method to education, to which we now turn, may be regarded as only another phase of the awakening of the modern inquisitive spirit which found expression earlier in the rise of the universities, the recovery and reconstruction of the ancient learning, the awakening of geographical discovery and exploration, and the questioning of the doctrines and practices of the Mediæval Church.

The Christian reaction against inquiry. The Christian attitude toward inquiry was from the first inhospitable, and in time became exceedingly intolerant.

The history of Christianity throughout all the Dark Ages is a history of the distrust of inquiry and reason, and the emphasis of blind emotional faith. Mysticism, good and evil spirits, and the interpretation of natural phenomena as manifestations of the Divine will from the first received large emphasis. The worship of saints and relics, and the great development of the sensuous and symbolic, changed the earlier religion into a crude polytheism. During the long period of the Middle Ages the miraculous flourished. The most extreme superstition pervaded all ranks of society. Magic and prayers were employed to heal the sick, restore the crippled, foretell the future, and punish the wicked. Sacred pools, the royal touch, wonder-working images, and miracles through prayer stood in the way of the development of medicine (R. 204). Disease was attributed to satanic influence, and a regular schedule of prayers for cures was in use. Sanitation was unknown. Plagues and pestilences were manifestations of Divine wrath, and hysteria and insanity were possession by the devil to be cast out by whipping and torture. One's future was determined by the position of the heavenly bodies at the time of birth. Eclipses, meteors, and comets were fearful portents of Divine displeasure:

Eight things there be a Comet brings,
  When it on high doth horrid rage;
Wind, Famine, Plague, and Death to Kings,
  War, Earthquakes, Floods, and Direful Change.

The literature on magic was extensive. The most miraculous happenings were recorded and believed. Trial by ordeal, following careful religious formulæ, was common before 1200, though prohibited shortly afterward by papal decrees (1215, 1222). The insistence of the Church on "the willful, devilish character of heresy," and the extension of heresy to cover almost any form of honest doubt or independent inquiry, caused an intellectual stagnation along lines of scientific investigation which was not relieved for more than a thousand years. The many notable advances in physics, chemistry, astronomy, and medicine made by

Moslem scholars (chapter VIII) were lost on Christian Europe, and had to be worked out again centuries later by the scholars of the western world. Out of the astronomy of the Arabs the Christians got only astrology; out of their chemistry they got only alchemy. Both in time stood seriously in the way of real scientific thinking and discovery.

The effect of these religious revolts on the attitude of the Church toward intellectual liberty was natural and marked. The tolerance of inquiry recently extended was withdrawn, and an era of steadily increasing intolerance set in which was not broken for more than a century. In an effort to stop the further spread of the heresy, the Church Council of Trent (1545–63) adopted stringent regulations against heretical teachings (p. 303), while the sword and torch and imprisonment were resorted to to stamp out opposition and win back the revolting lands. A century of merciless warfare ensued, and the hatreds engendered by the long and bitter struggle over religious differences put both Catholic and Protestant Europe in no tolerant frame of mind toward inquiry or new ideas.

It was into this post-Reformation atmosphere of suspicion and distrust and hatred that the new critical, inquiring, questioning spirit of science, as applied to the forces of the universe, was born. A century earlier the first scientists might have obtained a respectful hearing, and might have been permitted to press their claims; after the Protestant Revolts had torn Christian Europe asunder this could hardly be. As a result the early scientists found themselves in no enviable position. Their theories were bitterly assailed as savoring of heresy; their methods and purposes were alike suspected; and any challenge of an old long-accepted idea was likely to bring a punishment that was swift and sure. From the middle of the sixteenth to the middle of the seventeenth century was not a time when new ideas were at a premium anywhere in western Europe. It was essentially a period of reaction, and periods of reaction are not favorable to intellectual progress. It was into this century of reaction that modern scientific inquiry and reasoning, itself another form of expression of the intellectual attitudes awakened by the work of the humanistic scholars of the Italian Renaissance, made its first claim for a hearing.

In 1543 a Bohemian church canon and physician by the name of Nicholas Copernicus published his *De Revolutionibus Orbium Celestium*, in which he set forth the explanation of the universe which we now know. At first Copernicus' work attracted but little attention. An Italian Dominican by the name of Giordano Bruno (1548–1600), deeply impressed by the new theory, set forth in Latin and Italian the far-reaching and majestic implications of such a theory of creation, and was burned at the stake at Rome for his pains. A Dane, Tycho Brahe, after twenty-one years of careful observation of the heavens, showed Aristotle to be wrong in many particulars. His observations of the comet of 1577 led him to conclude that the theory of crystalline spheres was impossible, and that the common view of the time as to their nature was absurd. In 1609 a German by the name of Johann Kepler (1571–1630), using the records of observations which Tycho Brahe had accumulated and applying them to the planet Mars, proved the truth of the Copernican theory and framed his famous three laws for planetary motion.

Finally an Italian, Galileo Galilei, a professor at the University of Pisa, developing a telescope that would magnify to eight diameters, discovered Jupiter's satellites and Saturn's rings. The story of his discovery of the satellites of Jupiter is another interesting illustration of the careful scientific reasoning of these early workers (**R. 206**). Galileo also made a number of discoveries in physics, through the use of new scientific methods, which completely upset the teaching of the Aristotelians, and made the most notable advances in mechanics since the days of Archimedes.

Finally the English scholar Newton (1642–1728), in his *Principia* (1687), settled permanently all discussions as to the Copernican theory by his wonderful mathematical studies. He demonstrated mathematically the motions of the planets and comets, proved Kepler's laws to be true, explained gravitation and the tides, made clear the nature of light, and reduced dynamics to a science. So far-reaching in its importance was the scientific work of Newton that Pope's couplet seems exceedingly applicable:

> Nature and Nature's laws lay hid in night;
> God said, "Let Newton be," and all was light.

The sixteenth century thus marks the rise of modern scientific inquiry, and the beginnings of the study of modern science. The number of scholars engaged in the study was still painfully small, and the religious prejudice against which they worked was strong and powerful, but in the work of these few men we have not only *the beginnings* of the study of modern astronomy, physics, chemistry, metallurgy, medicine, anatomy, physiology, and natural history, but also the beginnings of a group of men, destined in time to increase greatly in number, who could see straight, and who sought facts regardless of where they might lead and what preconceived ideas they might upset. How deeply the future of civilization is indebted to such men, men who braved social ostracism and often the wrath of the Church as well, for the, to them, precious privilege of seeing things as they are, we are not likely to over-estimate. In time their work was destined to reach the schools, and to materially modify the character of all education.

Human reason in the investigation of nature. To the English statesman and philosopher, Francis Bacon, more than to any one else, are we indebted for the proper formulation and statement of this new scientific method. Though not a scientist himself, he has often been termed "the father of modern science." By showing how to learn from nature herself he turned the Renaissance energy into a new direction, and made a revolutionary break with the disputations and deductive logic of the Aristotelian scholastics which had for so long dominated university instruction.

In formulating the new method he first pointed out the defects of the learning of his time, which he classified under the head of "distempers," three in number, and as follows:

1. *Fantastic learning:* Alchemy, magic, miracles, old-wives' tales, credulities, superstitions, pseudo-science, and impostures of all sorts inherited from an ignorant past, and now conserved as treasures of knowledge.
2. *Contentious learning:* The endless disputations of the Scholastics about questions which had lost their significance, deductive in character, not based on any observation, not aimed primarily to arrive at truth, "fruitful of controversy, and barren of effect."
3. *Delicate learning:* The new learning of the humanistic Renaissance, verbal and not real, stylish and polished but not socially important, and leading to nothing except a mastery of itself.

As an escape from these three types of distempers, which well characterized the three great stages in human progress from the sixth to the fifteenth centuries, Bacon offered the inductive method, by means of which men would be able to distinguish true from false, learn to see straight, create useful knowledge, and fill in the great gaps in the learning of the time by actually working out new knowledge from the unknown. The collecting, organizing, comparing, questioning, and inferring spirit of the humanistic revival he now turned in a new direction by organizing and formulating for the work a new *Organum* to take the place of the old *Organon* of Aristotle. In Book I he sets forth some of the difficulties (R. 208) with which those who try new experiments or work out new methods of study have to contend from partisans of old ideas.

The *Novum Organum* showed the means of escape from the errors of two thousand years by means of a new method of thinking and work. His true service to science lay in the completeness of his analysis of the inductive process, and his declaration that those who wish to arrive at useful discoveries must travel by that road. As Macaulay well says, in his essay on Bacon:

> He was not the maker of that road; he was not the discoverer of that road; he was not the person who first surveyed and mapped that road. But he was the person who first called the public attention to an inexhaustible mine of wealth which had been utterly neglected, and which was accessible by that road alone.

To stimulate men to the discovery of useful truth, to turn the energies of mankind — even slowly — from assumption and disputation to patient experimentation, and to give an impress to human thinking which it has retained for centuries, is, as Macaulay well says, "the rare prerogative of a few imperial spirits." Macaulay's excellent summary of the importance of Bacon's work (R. 209) is well worth reading at this point.

The new method in the hands of subsequent workers. By the middle of the seventeenth century many important advances had been made in many different lines of scientific work. In the two centuries between 1450 and 1650, the foundations of modern mathematics and mechanics had been laid. At the beginning of the period Arabic notation and the early books of Euclid were about all that were taught; at its end the western world had worked out decimals, symbolic algebra, much of plane and spherical trigonometry, mechanics, logarithms (1614) and conic sections (1637), and was soon to add the calculus (1667–87). Mercator had published the map of the world (1569) which has ever since borne his name, and the Gregorian calendar had been introduced (1572). The barometer, thermometer, air-pump, pendulum clock, and the telescope had come into use in the period. Alchemy had passed over into modern chemistry; and the astrologer was finding less and less to do as the astronomer took his place. The English Hippocrates, Thomas Sydenham (1624–89), during this period laid the foundations of modern medical study, and the

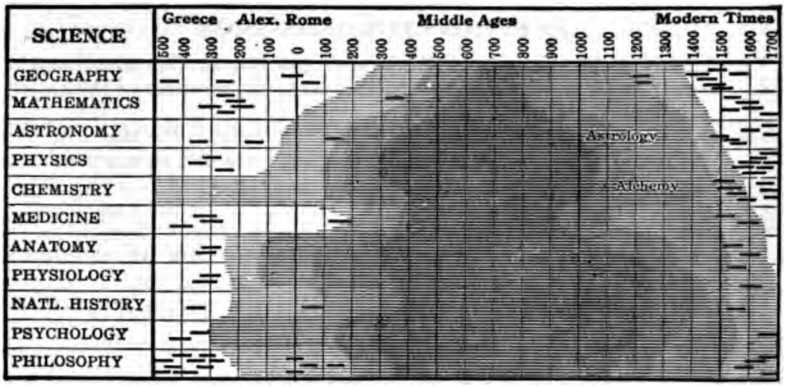

FIG. 44. THE LOSS AND RECOVERY OF THE SCIENCES

Each short horizontal line indicates the life-span of a very distinguished scholar in the science. Mohammedan scientists have not been included. The relative neglect or ignorance of a science has been indicated by the depth of the shading. The great loss to civilization caused by the barbarian inroads and the hostile attitude of the early Church is evident.

microscope was applied to the study of organic forms. Modern ideas as to light and optics and gases, and the theory of gravitation, were about to be set forth. All these advances had been made during the century following the epoch-making labors of Copernicus, the first modern scientific man to make an impression on the thinking of mankind.

Accompanying this new scientific work there arose, among a few men in each of the western European countries, an interest in scientific studies such as the world had not witnessed since the days of the Alexandrian Greek. This interest found expression in the organization of scientific societies, wholly outside the universities of the time, for the reporting of methods and results, and for the mingling together in sympathetic companionship of these seekers after new truth.

After 1650 the advance of science was rapid. The spirit of modern inquiry, which in the sixteenth century had animated but a few minds, by the middle of the seventeenth had extended to all the principal countries of Europe. The striking results obtained during the seventeenth century revealed the vast field waiting to be explored, and filled many independent modern-type scholars with an enthusiasm for research in the new domain of science. By the close of the eighteenth century the main outlines of most *of the modern sciences* had been established.

QUESTIONS FOR DISCUSSION

1. **Show that the rise of scientific inquiry was but another manifestation of the same inquiring spirit which had led to the recovery of the ancient literatures and history.**
2. **Show that it would be possible largely to determine the character of a civilization, if one knew only the prevailing ideas and conceptions as to scientific and religious matters.**
3. **Of which type was the reasoning of Galileo as to Jupiter's satellites?**
4. **Show that the three "distempers" described by Bacon characterize the three great stages in human progress from the sixth to the fifteenth centuries.**
5. **How do you explain the long rejection of the new sciences by the universities?**

SELECTED READINGS

In the accompanying *Book of Readings* the following selections are reproduced:

203. Macaulay: Attitude of the Ancients toward Scientific Inquiry.
204. Franck: The Credulity of Mediæval People.
205. Copernicus: How he arrived at the theory he set forth.
206. Brewster: Galileo's Discovery of the Satellites of Jupiter.
207. Inquisition: The Abjuration of Galileo.
208. Bacon: On Scientific Progress.
209. Macaulay: The Importance of Bacon's Work.

SUPPLEMENTARY REFERENCES

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*Libby, Walter. *An Introduction to the History of Science.*
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CHAPTER XVII

THE NEW SCIENTIFIC METHOD AND THE SCHOOLS

The rise of realism in education. As will be remembered from our study of the educational results of the Revival of Learning (chapter XI), the new schools established, in the reaction against mediævalism, to teach pure Latin and Greek, in time became formal and lifeless (p. 150), and their aim came to be almost entirely that of imparting a mastery of the Ciceronian style, both in writing and in speech. This idea, first clearly inaugurated by Sturm at Strassburg (R. 137), had now become fixed, and in its extreme is illustrated by the teachings of the Jesuit Campion at Prague (R. 146). As a reaction against this extreme position of the humanistic scholars there arose, during the sixteenth century, and as a further expression of the new critical spirit awakened by the Revival of Learning, a demand for a type of education which would make truth rather than beauty, and the realities of the life of the time rather than the beauties of a life of Roman days, the aim and purpose of education. This new spirit became known as Realism, was contemporaneous with the rise of scientific inquiry, and was an expression of a similar dissatisfaction with the learning of the time. As applied to education this new spirit may be said to have manifested itself in three different stages, as follows:

1. Humanistic realism.
2. Social realism.
3. Sense realism.

We will explain each of these, briefly, in order.

I. HUMANISTIC REALISM

A new aim in instruction. Humanistic realism represents the beginning of the reaction against form and style and in favor of ideas and content. The humanistic realists were in agreement with the classical humanists that the old classical literatures and the Bible contained all that was important in the education of youth. The ancient literatures, they held, presented "not only the widest product of human intelligence, but practically all that was worthy of man's attention." The two groups differed, however, *in that the classical* humanists conceived the aim of education to be the mastery of the vocabulary and style of Cicero, and the production of a new race of Roman youths for a revived Latin scholarly world, while the new humanistic realists wanted to use the old literatures as a means to a new end — that of teaching knowledge that would be useful in the world in which they lived.

Exponents of humanistic realism. The Dutch international scholar Erasmus (1467?–1536) (p. 147), the Frenchman Rabelais (1483–1553), and the English poet Milton (1608–74) stand as the clearest representatives of this new humanistic realism.

Erasmus had clearly distinguished between the education of words and the education of things, had pointed out the ease with which real truth is learned and retained, and had urged the study of the content rather than the form of the ancient authors.

The French non-conforming monk, curé, physician, and university scholar, François Rabelais, in his satirical *Life of Gargantua* (1535) and *The Heroic Deeds of Pantagruel* (1533) had set forth, even more clearly, the idea of obtaining from a study of the ancient authors (**R. 210**) knowledge that would be useful. He ridiculed the old scholastic learning, set forth the idea of using the old classics for realistic as well as humanistic ends, and also advocated physical, moral, social, and religious education in the spirit of the best writers and teachers of the Italian Renaissance. His book was extensively read and had some influence in shaping thinking, though Rabelais's importance in the history of education lies rather in his influence on later educational thinkers than on the life of his time.

FIG. 45. FRANÇOIS RABELAIS (1483–1553)

Perhaps the clearest example of humanistic realism is found in the writings of the English poet and humanitarian, John Milton. His *Tractate on Education* (1644) was extensively read, and was influential in shaping educational practice in the non-conformist secondary academies which arose a little later in England. Still later his ideas indirectly somewhat influenced American development.

Milton first gives us an excellent statement of the new religious-civic aim of post-Reformation education (**R. 211**), and then points out the defects of the existing education, whereby boys "spend seven or eight years merely in scraping together so much miserable Latine and Greek, as might be learnt otherwise easily and delightfully in one year." He then presents his plan for "a compleat and generous Education" for "noble and gentle youths," and tells "how all this may be done between twelve and one and twenty, less time than is now bestowed in pure trifling at Grammar and Sophistry." The course of study he outlines (**R. 212**) is enormous. Aside, though, from its impossibility of accomplishment except by a superior few, Milton's plan is thoroughly representative of the new humanistic-realistic point of view — that is, that education should impart useful information, though the information as Milton conceived it was to be drawn almost entirely from the books of the ancients.

FIG. 46. JOHN MILTON (1608–74)

Educational results of humanistic realism. The importance of humanistic realism in the history of education lies largely in that it was the first of a series of reactions that led later to sense-realism — that is, to the study of science and the application of scientific method in the schools.

In England it possesses still larger importance. Milton had called his institution an "Academy." After the restoration of the Stuarts (Charles II, 1660), some two thousand non-conforming clergymen were "dispossessed" by the Act of Conformity (1662; **R. 166**), and soon after this the children of Non-Conformists were excluded from the grammar schools and universities. Many of these clergymen now turned to teaching as a means of earning a livelihood and serving their people, and the ideas of the non-conformist Milton were influential in turning the schools thus established even further toward the study of useful subjects. Many of the new schools offered instruction in the modern languages, logic, rhetoric, ethics, geography, astronomy, algebra, geometry, trigonometry, surveying, navigation, history, oratory, economics, and natural and moral philosophy, as well as the old classical subjects. All teaching, too, was done in English, and the study of English language and literature was emphasized. This made these non-conformist academies in many respects superior to the older Latin grammar schools. After the enactment of the

Toleration Act, in 1689, these schools were allowed to incorporate and were gradually absorbed into the existing Latin grammar-school system of England, but unfortunately without producing much change in the character of these older institutions.

The idea of offering instruction in these new studies was in time carried to America, where better results were obtained. At first a few of the subjects, such as the mathematical studies, surveying, navigation, and English, were introduced into the existing Latin grammar or other schools of secondary grade. Especially was this true in the colonies south of New England. After 1751, and especially after about 1780, distinct Academies arose in the United States (chapter XVIII), whose purpose was to offer instruction in all these new subjects of study. From these our modern high schools have been derived.

II. SOCIAL REALISM

FIG. 47. MICHEL DE MONTAIGNE (1533–92)

Montaigne and Locke. Social realism represents a still further reaction away from the humanistic schools. It was the natural reaction of practical men of the new world against a type of education that tended to perpetuate the pedantry of an earlier age, by devoting its energies to the production of the scholar and professional man to the neglect of the man of affairs. The social realists were small in number, but powerful because of their important social connections and wealth, and they were very determined to have an education suited to their needs, even if they had to create it themselves (**R. 213**). The French nobleman, scholar, author, and civic officer, M. de Montaigne (1533–92), and the English philosopher, John Locke (1632–1704), were the clearest exponents of this new point of view, though it found expression in the writings of many others. Each declared for a practical, useful type of education for the young boy who was to live the life of a gentleman in the world of affairs.

Neither had any sympathy with the colleges and grammar schools of the time (**R. 214**), and both rejected the school for the *private tutor.* This tutor must be selected with great care, and first of all must be a well-bred gentleman — a man, as Montaigne says, "who has rather a well-made than a well-filled head" (R. 215). Locke cautions that "one fit to educate and form the Mind of a young Gentleman is not every where to be found," and of the common type of teacher he asks, "When such an one has empty'd out into his Pupil all the Latin and Logick he has brought from the University, will that Furniture make him a fine Gentleman?" (R. 216).

FIG. 48. JOHN LOCKE (1632–1704)

Both condemn the school training of their time, and both urge that the tutor train the judgment and the understanding rather than the memory. To impart good manners rather than mere information, and to train for life in the world rather than for the life of a scholar, seem to both of fundamental importance in the education of a boy. "The great world," says Montaigne, "is the mirror wherein we are to behold ourselves. In short, I would have this to be the book my young gentleman should study with the most attention." "Latin and Learning," says Locke, "make all the Noise; and the main Stress is laid upon Proficiency in Things a great Part whereof belong not to a Gentleman's Calling; which is to have the Knowledge of a Man of Business, a Carriage suitable to his Rank, and to be eminent and useful to his Country, according to his Station" (R. 216). Both emphasized the importance of travel abroad as an important factor in the education of a gentleman.

Their place in the history of education. Both Montaigne and Locke were concerned alone with the education of the sons of gentlemen, individuals now coming rapidly into prominence to dispute place in the world of affairs with the higher nobility on the one hand and the clergy on the other. With the education of any other class Montaigne never concerned himself. Locke was extensively read by the gentry of England, as expressive of the best current practice of their class, and his ideas as to education were also of some influence in shaping the instruction of the non-conformist teachers in the academies there. His place in the history of education is also of some importance, as we shall point out later, for the disciplinary theory of education which he set forth. Still more, Locke later exerted a deep influence on the writings of Rousseau (chapter XXI), and hence helped materially to shape modern educational theory.

The new schools for the sons of the gentry. Both Montaigne and Locke, in their emphasis on the importance of a practical education for the social and political demands of a gentleman concerned with the affairs of the modern world, represent a still further reaction against the humanistic schools of the time than did the humanistic realists whom we have just considered. Still more, both are expressive of the attitude of the nobility and gentry of the time, who had almost deserted the schools as pedantic institutions of little value. France was then the great country of Europe, and French language, French political ideas, French manners, and French tutors found their way into all neighboring lands. A new social and political ideal was erected — that of the polished man of the world, who could speak French, had traveled, knew history and politics, law and geography, heraldry and genealogy, some mathematics and physics with their applications, could use the sword and ride, was adept in games and dancing, and was skilled in the practical affairs of life.

III. SENSE REALISM

The new educational aims of this group. This represented a still further and more important step in advance than either of the preceding. In a very direct way sense realism in education was an outgrowth of the organizing work of Francis Bacon. Its aim was:

(1) To apply the same inductive method formulated by Bacon for the sciences to the work of education, with a view to organizing a general method which would greatly simplify the instructional process, reduce educational work to an organized system, and in consequence effect a great saving of time; and

(2) To replace the instruction in Latin by instruction in the vernacular, and to substitute new scientific and social studies, deemed of greater value for a modern world, for the excessive devotion to linguistic studies.

The sixteenth century had been essentially a period of criticism in education, and the leading thinkers on education, as in other lines of intellectual activity, were not in the schools. In the seventeenth century we come to a new group of men who attempted to *think out and* work out in practice the ideas advanced by the critics of the preceding period. In the seventeenth century we have, in consequence, the first serious attempt to formulate an educational method since the days of the Athenian Greeks and the treatise of Quintilian.

The possibility of formulating an educational method that would simplify the educational process and save time in instruction, appealed to a number of thinkers, in different lands. This group of thinkers, due to their new methods of attack and thought, the German historian of education, Karl von Raumer, has called *Innovators*. The chief pedagogical ideas of the Innovators were:

1. That education should proceed from the simple to the complex, and the concrete to the abstract.
2. That things should come before rules.
3. That students should be taught to analyze, rather than to construct.
4. That each student should be taught to investigate for himself, rather than to accept or depend upon authority.
5. That only that should be memorized which is clearly understood and of real value.
6. That restraint and coercion should be replaced by interest in the studies taught.
7. That the vernacular should be used as the medium for all instruction.
8. That the study of real things should precede the study of words about things.
9. That the order and course of Nature be discovered, and that a method of teaching based on this then be worked out.
10. That physical education should be introduced for the sake of health, and not merely to teach gentlemanly sports.
11. That all should be provided with the opportunity for an education in the elements of knowledge. This to be in the vernacular.
12. That Latin and Greek be taught only to those likely to complete an education, and then through the medium of the mother tongue.
13. That a uniform and scientific method of instruction could be worked out, which would reduce education to a science and serve as a guide for teachers everywhere.

The Englishman, Francis Bacon, whom we have previously considered; the German, Wolfgang Ratichius (or Ratke); and the Moravian bishop and teacher, Johann Amos Comenius, stand as perhaps the clearest examples of this organizing tendency in education. Ratke and Comenius will be considered here as types.

Wolfgang Ratke. Bacon had believed that the new scientific *knowledge should* be incorporated into the instruction of the schools, and had suggested, in his *Advancement of Learning* (1603–05), a broader course of study for them, and better facilities for scientific investigation and teaching. While Bacon was not a teacher and did not write specifically on school instruction, his writings nevertheless deeply influenced many of those who followed his thinking.

The first writer to apply Bacon's ideas to education and to attempt to evolve a new method and a new course of instruction was a German, by the name of Wolfgang Ratke (1571–1635). While studying in England he had read Bacon's *Advancement of Learning*, and from Bacon's suggestions Ratke tried to work out a new method of instruction.

In 1617 Ratke published, in Leipzig, his *Methodus Nova*, which was the pioneer work on school method, and is Ratke's chief claim to mention here. In this he laid down the fundamental rules for teaching, as he had thought them out. They were as follows:

1. The order of Nature was to be sought and followed.
2. One thing at a time, and that mastered thoroughly.
3. Much repetition to insure retention.
4. Use of the mother tongue for all instruction, and the languages to be taught through it.
5. Everything to be taught without constraint. The teacher to teach, and the scholars to keep order and discipline.
6. No learning by heart. Much questioning and understanding.
7. Uniformity in books and methods a necessity.
8. Knowledge of things to precede words about things.
9. Individual experience and contact and inquiry to replace authority.

We see here the essentials of the Baconian ideas, as well as the foreshadowings of many other subsequent reforms in teaching method.

Johann Amos Comenius. We now reach not only the greatest representative of sense realism, both in theory and practice, before the latter part of the eighteenth century, but also one of the commanding figures in the history of education. Comenius was born at Nivnitz, in Moravia, in 1592. As a member, pastor, and later bishop of the Moravian church, and as a follower of John Huss, he suffered greatly in the Catholic-Protestant warfare which raged over his native land during the period of the Thirty Years' War. His home twice plundered, his books and manuscripts twice burned, his wife and children murdered, and himself at times a captive and later an exile, Comenius gave his long life to the advancement of the interests of mankind through religion and learning. Driven from his home and country, he became a scholar of the world.

While a student at the University of Nassau, at the age of twenty, he read and was deeply impressed by the "Address" of Ratke. Bacon's *Novum Organum*, which appeared when he was twenty-eight, made a still deeper impression upon him. He seems to have been familiar also with the writings of the educational reformers of his time in all European lands. He traveled extensively, and maintained a large correspondence with the scholars of his time.

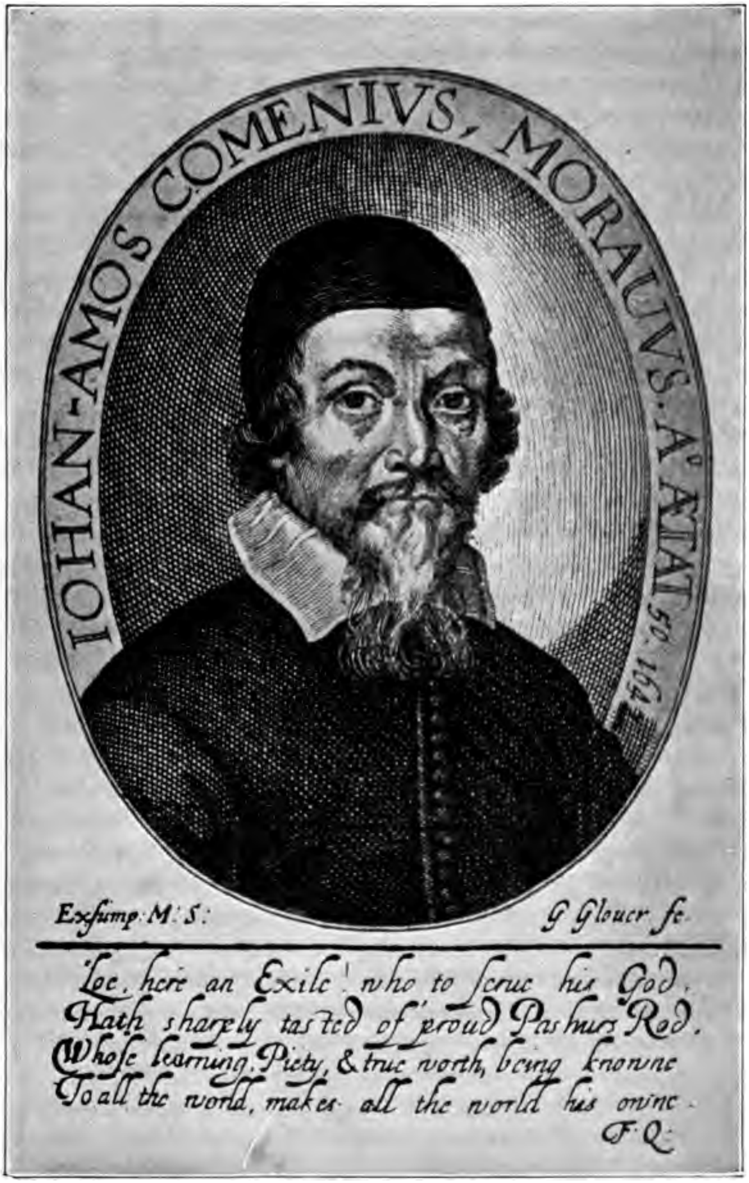
Comenius and educational method. While teaching at Lissa, in Poland, Comenius had formulated for himself the principles underlying school instruction, as he saw it, in a lengthy book which he called *The Great Didactic*. The title page (R. 218) and the table of contents (R. 219) will give an idea as to its scope. In this work Comenius formulated and explained his two fundamental ideas, namely, that all instruction must be carefully graded and arranged to follow the order of nature, and that, in imparting knowledge to children, the teacher must make constant appeal through sense-perception to the understanding of the child. We have here the fundamental ideas of Bacon applied to the school, and Comenius stands as the clearest exponent of sense realism in teaching up to his time, and for more than a century afterward.

Deeply religious by nature and training, Comenius held the Holy Scriptures to contain the beginning and end of all learning; to know God aright he held to be the highest aim; and with true Protestant fervor he contended that the education of every human being was a necessity if mankind was to enter into its religious inheritance, and piety, virtue, and learning were to be brought to their fruition. Unlike those who were enthusiasts for religious education only, Comenius saw further, and held an ideal of service to the State and Church here below for which proper training was needed. Still more, he believed in the education of human beings simply because they were human beings, and not merely for salvation, as Luther had held. Comenius was the first to formulate a practicable school method, working along the new lines marked out by Bacon.

Comenius' ideas as to the organization of schools. In his Di-

dactica Magna Comenius divided the school life of a child into four great divisions. The first concerned the period from infancy to the age of six, which he called The Mother School. For this period he wrote *The School of Infancy* (1628), a book intended primarily for parents, and one of such deep insight and fundamental importance that parents and teachers may still read it with interest and profit. In it he anticipated many of the ideas of the kindergarten of to-day. The next division was The Vernacular School, which covered the period from the ages of six to twelve. For this period six classes were to be provided, and the emphasis was to be on the mother tongue. This school was to be for all, of both sexes, and in it the basis of an education for life was to be given. It was to teach its pupils to read and write the mother tongue; enough arithmetic for the ordinary business of life, and the commonly used measures; to sing, and to know certain songs by rote; to know about the real things of life; the Catechism and the Bible; a general knowledge of history, and especially the creation, fall, and redemption of man; the elements of geography and astronomy; and a knowledge of the trades and occupations of life; all of which, says Comenius, can be taught better through the mother tongue than through the medium of the Latin and Greek. In scope this school corresponds with the vernacular school of modern Europe.

The next school was The Latin School, covering the years from twelve to eighteen, and in this German, Latin, Greek, and Hebrew were to be taught, by improved methods, and with physics and mathematics added. This school he divided into six classes, named from the principal study in each, as follows: (1) Grammar, (2) Physics, (3) Mathematics, (4) Ethics, (5) Dialectics, (6) Rhetoric. He also later outlined a plan for a six-class Gymnasium for Saros-Patak (R. 220), culminating in a seventh year for preparation for the ministry, which was an improvement on the Latin School and very modern in character. Had such a school become common, secondary education in Europe might have been a century in advance of where the nineteenth century found it. The Latin school was to be attended only by those of ability who were likely to enter the service of Church or State, or who intended to pass on to the University. This last was to cover the period from eighteen to twenty-four. Unlike all educational practice of his time and later, Comenius here provides for an educational ladder of the present-day American type, wholly


IOHAN·AMOS COMENIVS, MORAVVS. A° ÆTAT. 50. 1642
Exſump. M. S.
G Glouer fc.

Loe, here an Exile! who to ſerue his God,
Hath ſharply taſted of proud Paſhurs Rod.
Whoſe learning, Piety, & true worth, being knowne
To all the world, makes all the world his owne.
F. Q.

PLATE 3. JOHN AMOS COMENIUS (1592–1671)
The Moravian Bishop at the age of fifty. (After an engraving by Glover, printed as a *frontispiece to* Hartlib's *A Reformation of* Schooles. London, 1642.)

unlike the European two-class school system which (p.187) later evolved.

Comenius' work in reforming language teaching. At the time Comenius lived and wrote, the languages constituted almost the only subject of study, and Latin grammar was the great introductory subject. Comenius early became convinced, as a result of his teaching and studies in educational method, that the ancient classical authors were not only too difficult for boys beginning the study of Latin, but that they also did not contain the type of real knowledge he felt should be taught in the schools. He accordingly set to work to construct a series of introductory Latin readers which would form a graded introduction to the study of Latin, and which would also introduce the pupil to the type of world knowledge and scientific information he felt should be taught.

Beginning his textbook work with the *Janua*, and afterwards in the *Vestibulum* and *Orbis Pictus* as well, Comenius not only simplified the teaching of Latin by producing the best textbooks for instruction in the subject the world had ever known, but he also shifted the whole emphasis in instruction from words to things, and made the teaching of scientific knowledge and useful world information the keynote of his work. The hundred different chapters of the *Janua*, and the hundred and fifty-one chapters of the *Orbis Pictus*, were devoted to imparting information as to all kinds of useful subjects. (See **R. 221** for four pages of illustrations from the *Orbis Pictus*.)

The success of these textbooks was immediate and very great. Within a short time after the publication of the *Janua* it had been translated into Flemish, Bohemian, English, French, German, Greek, Hungarian, Italian, Latin, Polish, Spanish, and Swedish, as well as into Arabic, Mongolian, Russian, and Turkish. The *Orbis Pictus* was an even greater success. It went through many editions, in many languages; stood without a competitor in Europe for a hundred and fifteen years; and was used as an introductory textbook for nearly two hundred years. An American edition was brought out in New York City, as late as 1810. Thousands of parents, who knew nothing of Comenius and cared nothing for his educational ideas, bought the book for their children because they found that they liked the pictures and learned the language easily from it.

Place and influence of Comenius. Comenius stands in the *history of education* in a position of commanding importance.

He introduces the whole modern conception of the educational process, and outlines many of the modern movements for the improvement of educational procedure. What Petrarch was to the revival of learning, what Wycliffe was to religious thought, what Copernicus was to modern science, and what Bacon and Descartes were to modern philosophy, Comenius was to educational practice and thinking (R. 222). The germ of almost all eighteenth- and nineteenth-century educational theory is to be found in his work, and he, more than any one before him and for at least two centuries after him, made an earnest effort to introduce the new science studies into the school. Far more liberal than his Lutheran or Calvinistic or Anglican or Catholic contemporaries, he planned his school for the education of youth in religion and learning and to fit them for the needs of a modern world. Unlike the textbooks of his time, and for more than a century afterward, his were free from either sectarian bigotry or the intense and gloomy atmosphere of the age.

Yet Comenius lived at an unfortunate period in the history of human progress. The early part of the seventeenth century was not a time when an enthusiastic and aggressive and liberal-minded reformer could expect much of a hearing anywhere in western Europe. The shock of the contest into which western Christendom had been plunged by the challenge of Luther had been felt in every corner of Europe, and the culmination of a century of warfare was then raging, with all the bitterness and brutality that a religious motive develops. Christian Europe was too filled with an atmosphere of suspicion and distrust and hatred to be in any mood to consider reforms for the improvement of the education of mankind. As a result the far-reaching changes in method formulated by Comenius made but slight impression on his contemporaries; his attempt to introduce scientific studies awakened suspicion, rather than interest; and the new method which he formulated in his *Great Didactic* was ignored and the book itself was forgotten for centuries. His great influence on educational progress was through the reform his textbooks worked in the teaching of Latin, and the slow infiltration into the schools of the scientific ideas they contained. As a result, many of the fundamentally sound reforms for which he stood had to be worked out anew in the nineteenth century.

IV. REALISM AND THE SCHOOLS

The vernacular schools. The ideas for which the realists just described had stood were adopted in the people's schools but slowly, and came only after long waiting. The final incorporation of science instruction into elementary education did not come until the nineteenth century, and then was an outgrowth of the reform work of Pestalozzi on the one hand, and the new social, political, economic, and industrial forces of a modern world on the other.

The Peace of Westphalia (1648), which closed a century of bitter and vindictive religious warfare, was followed by another century of hatred, suspicion, and narrow religious intolerance and reaction. All parties now adopted an extremely conservative attitude in matters of religion and education, and the protection of orthodoxy became the chief purpose of the school. Reading, religion, a little counting and writing, and, in Teutonic lands, music, came to constitute the curriculum of such elementary vernacular schools as had come to exist, and the religious Primer and the Bible became the great school textbooks. The people were poor, much of Europe was impoverished and depopulated as a result of long-continued religious strife, the common people still occupied a very low social position, there were as yet no qualified teachers, and no need for general education aside from religion. Still more, during more than a thousand years the Church had established the tradition of providing free education, and when the governing authorities of the States which turned to Protestantism had taken from the Church both the opportunity to continue the schools and the wealth with which to maintain them, they were seldom willing to tax themselves to set up institutions to continue the work formerly done *gratis* by the Church. In consequence, regardless of Protestant educational theory as to the need for general education, but little progress in providing vernacular schools was made during the whole of the seventeenth and eighteenth centuries.

The transition now practically complete. From the time Petrarch made his first "find" at Liège (1333), in the form of two previously unknown orations of Cicero (p. 132), to the publication of the *Principia* (p. 208) of Newton (1687), is a period of approximately three and a half centuries. During these three and a half centuries a complete transformation of world-life had been effected, and the mediæval man, with his eyes on the past, had given place to the modern man with his eyes on the future. During these three and a half centuries revolutionary forces had been at work in the world of ideas, and the transition from mediæval to modern attitudes had been accomplished. From 1333 to 1433 was the century of "literary finds," and during this period the monastic treasures were brought to light and edited and the classical literature of Rome restored. Greek also was restored to the western world, and a reformed Latin, Greek, and Hebrew were given the place of first importance in the new humanistic school. The invention of printing took place in 1423; 1456 witnessed the appearance of the first printed book, and the perfection of the new means for the multiplication of books and the dissemination of ideas. Before 1500 the great era of geographical discovery had been inaugurated; a sea-route to India was found in 1487; and a new continent in 1492. In 1519–22 Magellan's ships rounded the world.

In 1517 Luther issued the challenge, the shock of which was felt in every corner of Christian Europe, and within a half-century much of northern and western Europe had been lost to the original Roman Church. Soon independence in thinking had been extended to the problem of the organization of the universe, and in 1543 Copernicus issued the book that clearly marks the beginning of modern scientific thinking and inquiry. Bacon had done his organizing work by 1620, and Newton's *Principia* (1687) finally established modern scientific thought and work. Comenius died in 1671, his great organizing work done, and his textbooks, with their many new educational ideas, in use all over Europe. The mediæval attitude still continued in religion and government, but the world as a whole had left mediæval attitudes behind it, and was facing the future of modern world organization and life. To the educational organization of this modern world we now turn, though before doing so we shall try to present a cross-section, as it were, of the development in educational theory and practice which had been attained by about the middle of the eighteenth century.

QUESTIONS FOR DISCUSSION

1. Explain why the scholars of the time were so intent on producing a new race of Roman youths for a revived Latin scholarly world.
2. Show that a reaction against humanism was certain to arise, and why.
3. How do you explain the very small influence exerted on the Latin gram-

mar schools of England by the non-conformist Academies, after they had been absorbed into the existing English non-state system of higher schools?
4. Compare Milton and Montaigne.
5. What would be the most probable effect on education of the erection of the polished-man-of-the-world ideal?
6. Enumerate the forces favoring and opposing the change of the language of instruction from Latin to the vernacular.
7. How many of the thirteen principles of the Innovators do we still hold to be valid?
8. Just what was new in the nine fundamental rules laid down by Ratke, in his *Methodus Nova?*
9. What is your estimate of the vernacular schools as outlined by Comenius? Of the plans for a gymnasium at Saros-Patak?
10. Compare Comenius' Latin school with the College of Calvin (p. 175).
11. State the new ideas in instruction embodied in the textbooks of Comenius.
12. Show that Comenius dominates modern educational ideas, even though his work was largely lost, in the same way that Petrarch or Wycliffe or Copernicus do modern work in their fields.
13. Explain the very slow development of vernacular schools after the Protestant Revolts.
14. Why would the introduction of *real* studies into them be especially slow?

SELECTED READINGS

In the accompanying *Book of Readings* the following illustrative selections are reproduced:

210. Rabelais: On the Nature of Education.
211. Milton: The Aim and Purpose of Education.
212. Milton: His Program for Study.
213. Adamson: Discontent of the Nobility with the Schools.
214. Montaigne: Ridicule of the Humanistic Pedants.
215. Montaigne: His Conception of Education.
216. Locke: Extracts from his Thoughts on Education.
217. Locke: Plan for Working Schools for Poor Children.
218. Comenius: Title-Page of the *Great Didactic.*
219. Comenius: Contents of the *Great Didactic.*
220. Comenius: Plan for the Gymnasium at Saros-Patak.
221. Comenius: Sample pages from the *Orbis Pictus.*
    (*a*) A page from a Latin-German edition of 1740.
    (*b*) Two pages from a Latin-English edition of 1727.
    (*c*) A page from the New York edition of 1810.
222. Butler: Place of Comenius in the History of Education.
223. Gesner: Need for *Realschulen* for the New Classes to be Educated.
224. Handbill: How the Scientific Studies began at Cambridge.
225. Green: Cambridge Scheme of Study of 1707.

SUPPLEMENTARY REFERENCES

*Adamson, J. W. *Pioneers of Modern Education, 1600–1700.*
Barnard, Henry. *German Teachers and Educators.*
Browning, Oscar, Editor. *Milton's Tractate on Education.*
*Butler, N. M. "The Place of Comenius in the History of Education"; in *Proc. N. E. A.,* 1892, pp. 723–28.

*Comenius, J. A. *Orbis Pictus* (Bardeen; Syracuse).

Hanus, Paul H. "The Permanent Influence of Comenius"; in *Educational Review*, vol. 3, pp. 226–36 (March, 1892).

Laurie, S. S. *History of Educational Opinion since the Renaissance.*

*Laurie, S. S. *John Amos Comenius.*

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*Quick, R. H. *Essays on Educational Reformers.*

*Vostrovsky, Clara. "A European School of the Time of Comenius (Prague, 1609)"; in *Education*, vol. 17, pp. 356–60 (February, 1897.)

Wordsworth, Christopher. *Scholæ Academicæ; Studies at the English Universities in the Eighteenth Century.*

CHAPTER XVIII

THEORY AND PRACTICE BY THE MIDDLE OF THE EIGHTEENTH CENTURY

We have now reached, in our history of the transition age which began with the Revival of Learning — the great events of which were the recovery of the ancient learning, the rediscovery of the historic past, the reawakening of scholarship, and the rise of religious and scientific inquiry — the end of the transition period, and we are now ready to pass to a study of the development and progress of education in modern times. Before doing so, however, we desire to gather up and state the progress in both educational theory and practice which had been attained by the end of this transition period, and to present, as it were, a cross-section of education at about the middle of the eighteenth century. To do this, then, before passing to a consideration of educational development in modern times, will be the purpose of this chapter. We shall first review the progress made in evolving a theory as to the educational purpose, and then present a cross-section view of the schools of the time under consideration.

I. PRE-EIGHTEENTH-CENTURY EDUCATIONAL THEORIES

The rise of the vernacular religious school. For the first time in history, if we except the schools of the early Christian period, the Protestant Revolts created a demand for some form of an elementary religious school for all. The Protestant theory as to personal *versus* collective salvation involved as a consequence the idea of the education of all in the essentials of the Christian faith and doctrine. The aim was the same as before — personal salvation — but the method was now changed from that of the Church as intermediary to personal knowledge and faith and effort. To be saved, one must know something of the Word of God, and this necessitated instruction. To this end, in theory at least, schools had to be established to educate the young for membership in the new type of Church relationship. Reading the vernacular, a little counting and writing, in Teutonic countries a little music, and careful instruction in a religious Primer (R. 202), the Catechism, *and the Bible, now* came to constitute the subject-matter of a new vernacular school for the children of Protestants, and to a certain extent in time for the children of Catholics as well. As we pointed out earlier (p. 187), between this new type of school for religious ends and the older Latin grammar school for scholarly purposes there was almost no relationship, and the two developed wholly independently of one another. In the Latin grammar schools one studied to become a scholar and a leader in the political or ecclesiastical world; in the vernacular religious school one learned to read that he might be able to read the Catechism and the Bible, and to know the will of the Heavenly Father. There was scarcely any other purpose to the maintenance of the elementary vernacular schools. This condition continued until well into the eighteenth century.

Early unsuccessful educational reformers. Back in the seventeenth century, as we have pointed out in the preceding chapter, a very earnest effort was made by Ratke and Comenius to introduce a larger conception of the educational process into the elementary vernacular school, to eliminate the gloomy religious material from the textbooks, to substitute a human-welfare purpose for the exclusively life-beyond view, and to transform the school into an institution for imparting both learning and religion. Comenius in particular hoped to make of the new elementary religious school a potent instrument for human progress by introducing new subject-matter, and by formulating laws and developing methods for its work which would be in harmony with the new scientific procedure so well stated by Francis Bacon.

John Locke, and the disciplinary theory of education. Another commanding figure in seventeenth-century pedagogical thought was the English scholar, philosopher, teacher, physician, and political writer, John Locke (1632–1704). In the preceding chapter we pointed out the place of Locke as a writer on the education of the sons of the English gentry, and illustrated by an extract from his *Thoughts* (**R.** **216**) the importance he placed on such a practical type of education as would prepare a gentleman's son for the social and political demands of a world fast becoming modern. Locke's place in the history of education, though, is of much more importance than was there (p. 217) indicated. Locke was essentially the founder of modern psychology, based on the application of the methods of modern scientific investigation to a *study of the* mind, and he is also of importance in the history *of educational* thought as having set forth, at some length and with much detail, the disciplinary conception of the educational process.

In his *Thoughts* Locke first sets forth at length the necessity for disciplining the body by means of diet, exercise, and the hardening process. "A sound mind in a sound body" he conceives to be "a short but full description of a happy state in this world," and a fundamental basis for morality and learning. The formation of good habits and manners through proper training, and the proper adjustment of punishments and rewards next occupies his attention, and he then explains his theory as to making all punishments the natural consequences of acts. Similarly the mind, as the body, must be disciplined to virtue by training the child to deny, subordinate desires, and apply reason to acts. The formation of good habits and the disciplining of the desires Locke regards as the foundations of virtue.

Similarly, in intellectual education, good thinking and the employment of reason is the aim, and these, too, must be attained through the proper discipline of the mind. Good intellectual education does not consist merely in studying and learning, he contends, as was the common practice in the grammar schools of his time, but must be achieved by a proper drilling of the powers of the mind through the use of selected studies. The purpose of education, he holds, is above all else to make man a reasoning creature. In the education given in the grammar schools of his time he found much that seemed to him wasteful of time and thoroughly bad in principle, and he used much space to point out defects and describe better methods of teaching and management, giving in some detail reasons therefor. His ideas as to needed reforms in the teaching of Latin (**R. 227**) are illustrative.

Locke on elementary education. For the beginnings of education, and for elementary education in general, Locke sticks close to the prevailing religious conception of his time. As for the education of the common people, he writes:

> The knowledge of the Bible and the business of his own calling is enough for the ordinary man; a Gentleman ought to go further.

Locke does, however, give some very sensible suggestions as to the reading of the Bible (**R. 228**), the imparting of religious ideas to children, and the desirability of transforming instruction so as to make it pleasant and agreeable, with plenty of natural playful *activity.*

Locke's great influence on educational thought did not come, though, for nearly three quarters of a century afterward, and it came then through the popularization of his best ideas by Rousseau.

Restating and expanding the leading ideas of Locke in his *Émile* (chapter XXI), and putting them into far more attractive literary form, Rousseau scattered Locke's ideas as to educational reform over Europe. In particular Rousseau popularized Locke's ideas as to the replacement of authority by reason and investigation, his emphasis on physical activity and health, his contention that the education of children should be along lines that were natural and normal for children, and above all Locke's plea for education through the senses rather than the memory. In so popularizing Locke's ideas, and at a time when all the political tendencies of the period were in the direction of the rejection of authority and the emphasis of the individual, those educational reformers who were inspired by the writings of Rousseau created and applied, largely on the foundations laid down by John Locke, a new theory as to educational aims and procedure which dominated all early nineteenth-century instruction. This we shall trace further in a subsequent chapter (chapter XXI).

II. MID-EIGHTEENTH-CENTURY EDUCATIONAL CONDITIONS

It was at this point that the educational problem stood, in so far as a theory as to educational aims and the educational process was concerned, when Rousseau took it up (1762). Before passing to a consideration of his work, though, and the work of those inspired by him and by the French revolutionary writers and statesmen, let us close this third part of our history by a brief survey of the development so far attained, the purpose, character, aims, and nature of instruction in the schools, and their means of support and control at about the middle of the century in which Rousseau wrote, and before the philosophical and political revolutions of the latter half of the eighteenth century had begun to influence educational aims and procedure and control.

The purpose. The purpose of maintaining the elementary vernacular school, in all European lands, remained at the middle of the eighteenth century much as it was a century before, though in the German States and in the American Colonies there was a noticeable shifting of emphasis from the older exclusively religious purpose toward a newer conception of education as preparation for life in the world here. Still, one learned to read chiefly "to learn some orthodox Catechism," "to read fluently in the New Testament," and to know the will of God, or, as stated in the law of the Connecticut Colony (**R. 193**), "in some competent measure to understand the main grounds and principles of Christian religion necessary to salvation." The teacher was still carefully looked after as to his "soundness in the faith" (**R. 238 a**); he was required "to catechise his scholars in the principles of the Christian religion," and "to commend his labors amongst them unto God by prayer morning and evening, taking care that his scholars do reverently attend during the same." The minister in practically all lands examined the children as to their knowledge of the Catechism and the Bible, and on his visits quizzed them as to the Sunday sermon.

In Church-of-England schools "the End and Chief Design" of the schools established continued to be instruction in "the Knowledge and Practice of the Christian Religion as Professed and Taught in the Church of England" (**R. 238 b**). In German lands the elementary vernacular school was still regarded as "the portico of the Temple," "Christianity its principal work," and not as "mere establishments preparatory to public life, but be pervaded by the religious spirit." In the schools of La Salle's organization, which was most prominent in elementary vernacular education in Catholic France, the aim continued to be (**R. 182**) "to teach them to live honestly and uprightly, by instructing them in the principles of our holy religion and by teaching them Christian precepts."

Weakening of the old religious theory. By the middle of the eighteenth century, however, there is a noticeable weakening of the hold of the old religious theory on the schools in most Protestant lands. In England there was a marked relaxation of the old religious intolerance in educational matters as the century proceeded, and new textbooks, embodying but little of the old gloomy religious material, appeared and began to be used. Coincident with this growth of religious tolerance among the English we find the Church of England redoubling its efforts to hold the children of its adherents, by the organization of parish schools and the creation of a vast system of charitable religious schools. In German lands, too, a marked shifting of emphasis away from solely religious ends and toward the needs *of the government* began, toward the end of the eighteenth century. *to be evident*

It was in the American Colonies, though, that the waning of the old religious interest was most notable. Due to rude frontier conditions, the decline in force of the old religious-town governments, the diversity of sects, the rise of new trade and civil interests, and the breakdown of old-home connections, the hold on the people of the old religious doctrines was weakened there earlier than in the old world. By 1750 the change in religious thinking in America had become quite marked.

Studies and textbooks. The studies of the elementary vernacular school remained, throughout the whole of the eighteenth century, much as before, namely, reading, a little writing and ciphering, some spelling, religion, and in Teutonic countries a little music. La Salle (**R. 182**) had prescribed, for the Catholic vernacular schools of France, instruction in French, some Latin, "orthography, arithmetic, the matins and vespers, le Pater, l'Ave Maria, le Credo et le Confiteor, the Commandments, responses, Catechism, duties of a Christian, and maxims and precepts drawn from the Testament." The Catechism was to be taught one half-hour daily. The schoolbooks in England in Locke's day, as he tells us in his *Thoughts*, were "the Horn Book, Primer, Psalter, Testament, and Bible." These indicate merely a religious vernacular school. The purpose stated for the English Church charity-schools (**R. 238 b**), schools that attained to large importance in England and the American Colonies during the eighteenth century, shows them to have been, similarly, religious vernacular schools. The *School Regulations* which Frederick the Great promulgated for Prussia (1763), fixed the textbooks to be used (**R. 274,** § 20), and indicate that the instruction in Prussia was still restricted to reading, writing, religion, singing, and a little arithmetic. In colonial America, Noah Webster's description (**R. 230**) of the schools he attended in Connecticut, about 1764–70, shows that the studies and textbooks were "chiefly or wholly Dilworth's Spelling Books, the Psalter, Testament, and Bible."

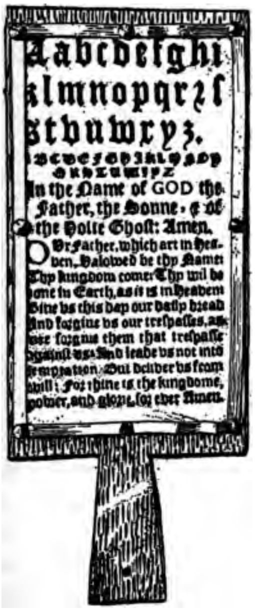

In the Name of GOD the Father, the Sonne, & of the Holie Ghoſt: Amen.

FIG. 49. A HORN BOOK

with a little writing and ciphering. A few words of description of these older books may prove useful here.

The Horn Book. The Horn Book goes back to the close of the fifteenth century, and by the end of the sixteenth century was in common use throughout England. Somewhat similar alphabet boards, lacking the handle, were also used in Holland, France, and in German lands. This, a thin oak board on which was pasted a printed slip, covered by translucent horn, was the book from which children learned their letters and began to read, the mastery of which usually required some time. The Horn Book was much used well into the eighteenth century, but its reading matter was in time incorporated into the school Primer, now evolved out of an earlier elementary religious manual.

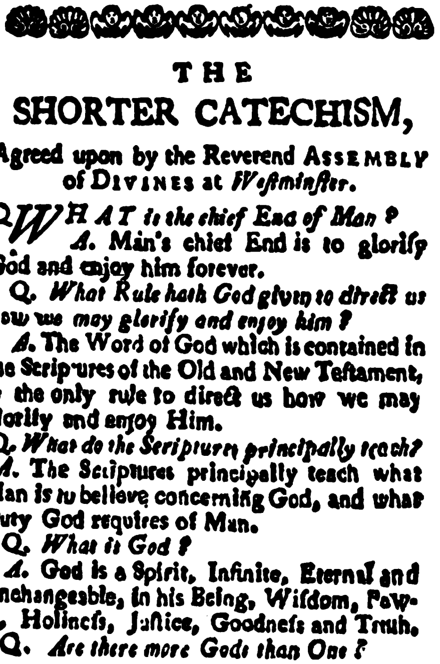
The Primer. Originally the child next passed to the Catechism and the Bible, but about the middle of the seventeenth century the Primer began to be used. The Primer in its original form was a simple manual of devotion for the laity, compiled without any thought of its use in the schools. It contained the Creed, the Lord's Prayer, the Ten Commandments, and a few of the more commonly used prayers and psalms. The Catechism soon was added, and with the prefixing of the alphabet and a few syllables and words it was transformed, as schools arose, into the first reading book for children. There was at first no attempt at grading, illustration, or the introduction of easy reading material. About the close of the seventeenth century the illustrated Primer, with some attempt at grading and some additional subject-matter, made its appearance, both in England and America, and at once leaped into great popularity.

The idea possibly goes back to the *Orbis Pictus* (1654) of Comenius (p. 223: R. 221), the first illustrated schoolbook ever written. The first English Primer adapted to school use was *The Protestant Tutor*, a rather rabid anti-Catholic work which appeared in London, about 1685. It was an abridgment of this book which the same publisher brought out in Boston, about 1690, under the name of *The New England Primer* (R. 202).

This new work at once leaped into great popularity, and became the accepted reading book in all the schools of the American Colonies except those under the Church of England. For the next century and a quarter it was the chief school and reading book in use among the Dissenters and Lutherans in America. Schoolmasters drilled the children on the reading matter and the

Catechism it contained, and the people recited from it yearly in the churches. It was also used for such spelling as was given. It was the first great American textbook success, and was still in use in the Boston dame schools as late as 1806. It was reprinted in England, and enjoyed a great sale among Dissenters there. Its sales in America alone have been estimated at least three million copies. The sale in Europe was also large.

The Catechism. In all Protestant German lands the Shorter Catechism prepared by Luther, or the later Heidelberg Catechism; in Calvinistic lands the Catechism of Calvin; and in England and the American Colonies the Westminster Catechism, formed the backbone of the religious instruction. Teachers drilled their pupils in these as thoroughly as on any other subject, writing masters set as copies sentences from the book, children were required to memorize the answers, and the doctrines contained were emphasized by teacher and preacher so that the children were saturated with the religious ideas set forth. No book except the Bible did so much to form the character, and none so much to fix the religious bias of the children. Almost equal importance was given to the Catechism in Catholic lands (R. 182, §§ 21–22), though there supplemented by more religious influences derived from the ceremonial of the Church.



THE

SHORTER CATECHISM,

Agreed upon by the Reverend ASSEMBLY of DIVINES at *Weſtminſter.*

Q. *WHAT is the chief End of Man?*

A. Man's chief End is to glorify God and enjoy him forever.

Q. *What Rule hath God given to direct us how we may glorify and enjoy him?*

A. The Word of God which is contained in the Scriptures of the Old and New Teſtament, Is the only rule to direct us how we may glorify and enjoy Him.

Q. *What do the Scriptures principally teach?*

A. The Scriptures principally teach what Man is to believe concerning God, and what Duty God requires of Man.

Q. *What is God?*

A. God is a Spirit, Infinite, Eternal and Unchangeable, in his Being, Wiſdom, Power, Holineſs, Juſtice, Goodneſs and Truth.

Q. *Are there more Gods than One?*

FIG. 50. THE WESTMINSTER CATECHISM
(A page from *The New England Primer*, natural size)

Spellers. The next step forward, in the transition from the religious Primer to secular reading matter for school children, came in the use of the so-called Spellers. After about 1740 such books became very popular, due to the publication that year of Thomas

Dilworth's *A New Guide to the English Tongue*. This book contained, as the title-page (**R.** 229) declared, selected lists of words with rules for their pronunciation, a short treatise on grammar, a collection of fables with illustrations for reading, some moral selections, and forms of prayer for children. It became very popular in New as well as in old England, and was followed by a long line of imitators, culminating in America in the publication of Noah Webster's famous blue-backed *American Spelling Book*, in 1783. This was after the plan of the English Dilworth, but was put in better teaching form. It contained numerous graded lists of words, some illustrations, a series of graded reading lessons, and was largely secular in character. It at once superseded the expiring *New England Primer* in most of the American cities, and continued popular in the United States for more than a hundred years. It was the second great American textbook success, and was followed by a long list of popular Spellers and Readers, leading up to the excellent secular Readers of the present day.

Arithmetic and Writing. The first English Arithmetic, published about 1540 to 1542, has been entirely lost, and was probably read by few. The first to attain any popularity was *Cocker's Arithmetic* (1677), this "Being a Plain and Familiar Method suitable to the meanest Capacity, for the understanding of that incomparable Art." A still more popular book was *Arithmetick: or that Necessary Art Made Most Easie*, by J. Hodder, Writing Master, a reprint of which appeared in Boston, in 1719. The first book written by an American author was Isaac Greenwood's *Arithmetick, Vulgar and Decimal*, which appeared in Boston, in 1729. In 1743 appeared Dilworth's *The Schoolmaster's Assistant*, a book which retained its popularity in both England and America until after the beginning of the nineteenth century.

FIG. 51. FRONTISPIECE TO NOAH WEBSTER'S "AMERICAN SPELLING BOOK"

This is from the 1827 edition, reduced one third in size.

No text in Arithmetic is mentioned in the School Regulations of Frederick the Great (R. 274, § 20), or in scarcely any of the descriptions left us of eighteenth-century schools. The study itself was common, but not universal, and was one that many teachers were not competent to teach. To possess a reputation as an "arithmeticker" was an important recommendation for a teacher, while for a pupil to be able to do sums in arithmetic was unusual, and a matter of much pride to parents. The subject was frequently taught by the writing master, in a separate school, while the reading teacher confined himself to reading, spelling, and religion. The teacher might or might not possess an arithmetic of his own, but the instruction to the pupil was practically always dictated and copied instruction. Each pupil made up his own book of rules and solved problems, and few pupils ever saw a printed arithmetic. Many of the early arithmetics were prepared after the catechism plan. There was almost no attempt to use the subject for drill in reasoning or to give a concrete type of instruction, before about the middle of the eighteenth century, and but little along such reform lines was accomplished until after the beginning of the nineteenth century.

Writing, similarly, was taught by dictation and practice, and the art of the "scrivener," as the writing master was called, was one thought to be difficult to learn. The lack of practical value of the art, the high cost of paper, and the necessity usually for special lessons, all alike tended to make writing a much less commonly known art than reading. Fees also were frequently charged for instruction in writing and arithmetic; reading, spelling, and religion being the only free subjects. The scrivener and the arithmetic teacher also frequently moved about, as business warranted, and was not fixed as was the teacher of the reading school.

The teachers. The development of the vernacular school was retarded not only by the dominance of the religious purpose of the school, but by the poor quality of teachers found everywhere in the schools. The evolution of the elementary-school teacher of to-day out of the church sexton, bell-ringer, or grave-digger, or out of the artisan, cripple, or old dame who added school teaching to other employment in order to live, forms one of the interesting as well as one of the yet-to-be-written chapters in the history of the evolution of the elementary school.

Teachers in elementary schools everywhere in the eighteenth *century were* few in number, poor in quality, and occupied but a lowly position in the social scale. School dames in England (**R. 235**) and later in the American Colonies, and on the continent of Europe teachers who were more sextons, choristers, beadles, bell-ringers, grave-diggers, shoemakers, tailors, barbers, pensioners, and invalids than teachers, too often formed the teaching body for the elementary vernacular school (**Rs. 231, 232, 233**). In Dutch, German, and Scandinavian lands, and in colonies founded by these people in America, the parish school, closely tied up with and dependent upon the parish church, was the prevailing type of vernacular school, and in this the teacher was regarded as essentially an assistant to the pastor (**R. 236**) and the school as a dependency of the Church.

In England, in addition to regular parish schools and endowed elementary schools, three peculiar institutions, known as the Dame School, the religious charity-school, and the private-adventure or "hedge school" had grown up, and the first two of these had reached a marked development by the middle of the eighteenth century. Because these were so characteristic of early English educational effort, and also played such an important part in the American Colonies as well, they merit a few words of description at this point.

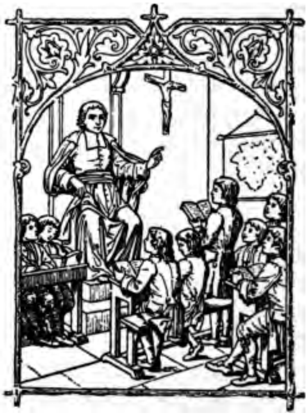


FIG. 52. A "CHRISTIAN BROTHERS" SCHOOL

La Salle teaching at Grenoble. Note the adult type of dress of the boys.

The Dame School. The Dame School arose in England after the Reformation. By means of it the increasing desire for a rudimentary knowledge of the art of reading could be satisfied, and at the same time certain women could earn a pittance. This type of school was carried early to the American Colonies, and out of it was in time evolved, in New England, the American elementary school. The Dame School was a very elementary school, kept in a kitchen or living-room by some woman who, in her youth, had obtained the rudiments of an education, and who now desired to earn a small stipend for herself by imparting to the children of her neighborhood her small store of learning. For a few pennies a week the dame took the children into her home and explained to *them the mysteries* connected with learning the beginnings of reading and spelling. Occasionally a little writing and counting also were taught, though not often in England. In the American Colonies the practical situations of a new country forced the employment as teachers of women who could teach all three subjects, thus early creating the American school of the so-called "3 Rs" — "Reading, Riting, Rithmetic." The Dame School appears so frequently in English literature, both poetry and prose, that it must have played a very important part in the beginnings of elementary education in England. Of this school Shenstone (1714–63) writes (**R. 235**):

> In every village marked with little spire,
> Embowered in trees, and hardly known to fame,
> There dwells, in lowly shed and mean attire,
> A matron old, whom we schoolmistress name,
> Who boasts unruly brats with birch to tame.

This school flourished greatly in America during the eighteenth century, but with the coming of Infant Schools, early in the nineteenth, was merged into these to form the American Primary School.

The religious charity-school. Another thoroughly characteristic English institution was the church charity-school. The first of these was founded in Whitechapel, London, in 1680. In 1699, when the School of Saint Anne, Soho (**R. 237**), was founded by "Five Earnest Laymen for the Poore Boys of the Parish," it was the sixth of its kind in England. In 1699 the "Society for the Promotion of Christian Knowledge" (S.P.C.K.) was founded for the purpose, among other things, of establishing catechetical schools for the education of the children of the poor in the principles of the Established Church (**R. 238 b**). To develop piety and help the poor to lead industrious, upright, self-respecting lives, "to make them loyal Church members, and to fit them for work in that station of life in which it had pleased their Heavenly Father to place them," were the principal objects of the Society.

All were taught reading, spelling, and the Catechism, and instruction in writing and arithmetic might be added. The training might also be coupled with that of the "schools of industry" (workhouse schools, as described by Locke [**R. 217**]) to augment the economic efficiency of the boy. Girls seem to have been provided for almost equally with boys, and, in addition to being taught to read and spell, were taught "to knit their Stockings and Gloves, to Mark, Sew, and make and mend their Cloathes." Both boys and girls were usually provided with books and clothing, a regular uniform being worn by the boys and girls of each school.

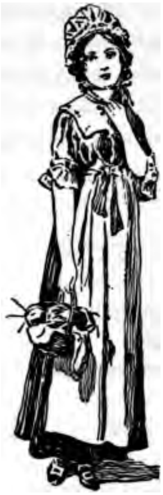


FIG. 53.
A CHARITY-SCHOOL GIRL IN UNIFORM
Saint Anne's, Soho, England

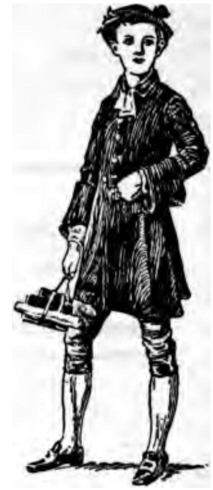


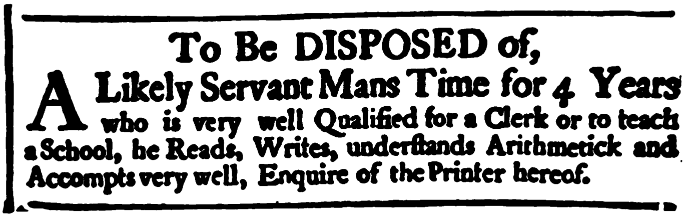
FIG. 54.
A CHARITY-SCHOOL BOY IN UNIFORM
Saint Anne's, Soho, England

The chief motive in the establishment of these schools, though, was to decrease the "Prophaness and Debauchery . . . owing to a gross Ignorance of the Christian Religion" (R. 237) and to educate "Poor Children in the Rules and Principles of the Christian Religion as professed and taught in the Church of England." From England the charity-school idea was early carried to the Anglican Colonies in America and became a fixed institution in New Jersey, Pennsylvania, Delaware, Maryland, and somewhat in the Colonies farther south. In the Pennsylvania constitution of 1790 we find the following directions for the establishment of a state charity-school system to supplement the parish schools of the churches:

> Sec. 1. The legislature shall, as soon as conveniently may be, provide, by law, for the establishment of schools throughout the State, in such manner that the poor may be taught *gratis*.

The first Pennsylvania school law of 1802 carried this direction into effect by providing for pauper schools in the counties, a condition that was not done away with until 1834. In New Jersey the system lasted until 1838.

The private-adventure, or "hedge," school. This was a school analogous to the Dame School, but was kept by a man instead of a woman, and usually at his home or shop. Ofttimes the school was kept secretly, to avoid church or state inspection, and then was known as a "hedge school." The term soon came to be applied to any kind of a poor school, taught in an irregular manner or place. Similar irregular schools, under equivalent names, also were found in German lands, the Netherlands, and in France, while in the American Colonies "indentured white servants" were frequently let out as schoolmasters. The following advertisement of a teacher for sale is typical of private-adventure elementary school-keeping during the colonial period. These schools were taught by itinerant schoolkeepers, artisans, and tutors of the poorer type, but offered the beginnings of elementary education to many a child who otherwise would never have been able to learn to read. In the early eighteenth century these schools attained a remarkable development in England.



To Be DISPOSED of,

A Likely Servant Mans Time for 4 Years who is very well Qualified for a Clerk or to teach a School, he Reads, Writes, underſtands Arithmetick and Accompts very well, Enquire of the Printer hereof.

FIG. 55. ADVERTISEMENT FOR A TEACHER TO LET
(From the *American Weekly Mercury* of Philadelphia, 1735)

A new influence of tremendous future importance — general reading — was now coming in; the vernacular was fast supplanting Latin; newspapers were being started; little books or pamphlets (tracts) containing general information were being sold; books for children and beginners were being written; the popular novel and story had appeared; and all these educative forces were creating a new and a somewhat general desire for a knowledge of the art of reading. This in turn caused a new demand for schools to teach the long-locked-up art, and this demand was capitalized to the profit of many types of people.

The apprenticing of orphans and children of the poor. The compulsory apprenticing of the children of the poor to a trade or to work was an old English institution, and workhouse training, or the so-called "schools of industry," became, by the eighteenth century, a prominent feature of the English care of the poor. These represented the only form of education supported by taxation, and the only form of education to which Parliament gave any attention during the whole of the eighteenth century. This type of institution also was carried to the Anglican Colonies in America, as we have seen in the documents for Virginia (**R. 200 a**), and became an established institution in America as well.

The apprenticing of boys to a trade, a still older institution, was also much used as a means for training youths for a life in the trades, not only in England and the American Colonies, but throughout all European lands as well. The conditions surrounding the apprenticing of a boy had by the eighteenth century become quite fixed. The "Indenture of Apprenticeship" was drawn up by a lawyer, and by it the master was carefully bound to clothe and feed the boy, train him properly in his trade, look after his morals, and start him in life at the end of his apprenticeship. This is well shown in the many records which have been preserved, both in England (**R. 242**) and the American Colonies (**R. 201**). For many boys this type of education was the best possible at the time, and worthily started the possessor in the work of his trade.

Methods of instruction. Throughout the eighteenth century the method of instruction commonly employed in the vernacular schools was what was known as the individual method. This was wasteful of both time and effort, and unpedagogical to a high degree (**R. 244**). Everywhere the teacher was engaged chiefly in hearing recitations, testing memory, and keeping order. The pupils came to the master's desk, one by one (see Figure 37, p. 177), and recited what they had memorized. Aside from imposing discipline, teaching was an easy task. The pupils learned the assigned lessons and recited what they had learned. Such a thing as methodology — technique of instruction — was unknown. The dominance of the religious motive, too, precluded any liberal attitude in school instruction, the individual method was time-consuming, school buildings often were lacking, and in general there was an almost complete lack of any teaching equipment, books, or supplies. Viewed from any modern standpoint the schools of the eighteenth century attained to but a low degree of efficiency (**R. 244**). The school hours were long, the schoolmaster's residence or place of work or business was commonly used as a schoolroom, and such regular schoolrooms as did exist were dirty and noisy and but poorly suited to school purposes. Schools everywhere, too, were ungraded, the school of one teacher being like that of any other teacher of that class.

Hearing lessons, assigning new tasks, setting copies, making quill pens, dictating sums, and imposing order completely absorbed the time and the attention of the teacher.

School discipline. The discipline everywhere was severe. "A boy has a back; when you hit it he understands," was a favorite pedagogical maxim of the time. Whipping-posts were sometimes set up in the schoolroom, and practically all pictures of the schoolmasters of the time show a bundle of switches near at hand. Boys in the Latin grammar schools were flogged for petty offenses (**R. 245**). The ability to impose order on a poorly taught and, in consequence, an unruly school was always an important requisite of the schoolmaster. A Swabian schoolmaster, Häuberle by name, with characteristic Teutonic attention to details, has left on record[1] that, in the course of his fifty-one years and seven months as a teacher he had, by a moderate computation, given 911,527 blows with a cane, 124,010 blows with a rod, 20,989 blows and raps with a ruler,

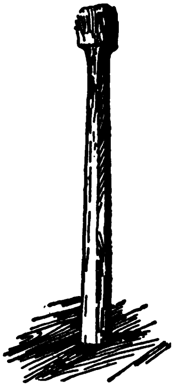


FIG. 56. A SCHOOL WHIPPING-POST

Drawn from a picture of a five-foot whipping-post which once stood in the floor of a schoolhouse at Sunderland, Massachusetts. Now in the Deerfield Museum.

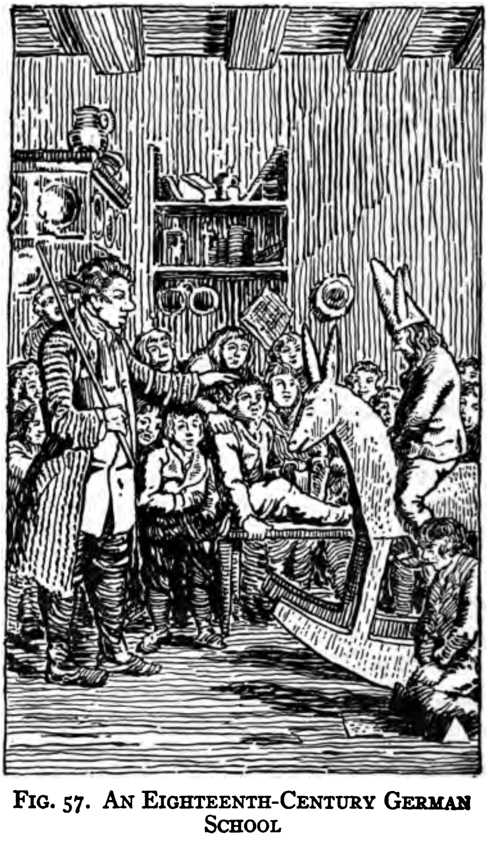


FIG. 57. AN EIGHTEENTH-CENTURY GERMAN SCHOOL

Reproduction of an engraving by J. Mettenleiter, now in the Kupferstichkabinet, Munich, and printed in Joh. Ferd. Schlez's *Dorfschulen zu Langenhausen*. Nuremberg, 1795.

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[1] Barnard, Henry. Translated from Karl von Raumer; *in his American Journal of Education*, vol. V, p. 509.

136,715 blows with the hand, 10,235 blows over the mouth, 7905 boxes on the ear, 1,115,800 raps on the head, and 22,763 *notabenes* with the Bible, Catechism, singing book, and grammar. He had 777 times made boys kneel on peas, 613 times on a triangular piece of wood, had made 3001 wear the jackass, and 1707 hold the rod up, not to mention various more unusual punishments he had contrived on the spur of the occasion. Of the blows with the cane, 800,000 were for Latin words; of the rod 76,000 were for texts from the Bible or verses from the singing book. He also had about 3000 expressions to scold with, two thirds of which were native to the German tongue and the remainder his invention.

Pedagogical writers of the time uniformly complain of the severe discipline of the schools, and the literature of the period abounds in allusions to the prevailing harshness of the school discipline. A few writers condemn, but most approve heartily of the use of the rod. "Spare the rod and spoil the child" had for long been a well-grounded pedagogical doctrine.

Conditions surrounding childhood. It is difficult for us of today to re-create in imagination the pitiful life-conditions which surrounded children a century and a half ago. Often the lot of the children of the poor, who then constituted the great bulk of all children, was little less than slavery. Wretchedly poor, dirty, unkempt, hard-worked, beaten about, knowing strong drink early, illiterate, often vicious — their lot was a sad one. For the children of the poor there were few, if any, educational opportunities.

In the towns children were apprenticed out early in life, and for long hours of daily labor. Child welfare was almost entirely neglected, children were cuffed about and beaten at their work, juvenile delinquency was a common condition, child mortality was heavy, and ignorance was the rule. Schools generally were pay institutions or a charity, and not a birthright, and usually existed only for the middle and lower-middle classes in the population who were attendants at the churches and could afford to pay a little for the schooling given. Reading and religion were usually the only free subjects. Only in the New England Colonies, where the beginnings of town and colony school systems were evident, and in a few of the German States where state control was beginning to be exercised, was a better condition to be found.

Among the middle and upper social classes, particularly on *the continent of Europe*, a stiff artificiality everywhere prevailed.

Children were dressed and treated as miniature adults, the normal activities of childhood were suppressed, and the natural interests and emotions of children found little opportunity for expression. Wearing powdered and braided hair, long gold-braided coats, embroidered waistcoats, cockaded hats, and swords, boys were treated more as adults than as children. Girls, too, with their long dresses, hoops, powdered hair, rouged faces, and demure manner, were trained in a, for children, most unnatural manner. The dancing master for their manners and graces, and the religious instructor to develop in them the ability to read and to go through a largely meaningless ceremonial, were the chief guides for the period of their childhood.

School support. No uniform plan, in any country, had as yet been evolved for even the meager support which the schools of the time received. The Latin grammar schools were in nearly all cases supported by the income from old "foundations" and from students' fees, with here and there some state aid. The new elementary vernacular schools, though, had had assigned to them few old foundations upon which to draw for maintenance, and in consequence support for elementary schools had to be built up from new sources, and this required time.

We thus find in most lands endowed elementary schools, parish schools, dame schools, private-adventure schools of many types, and charity-schools, all existing side by side, and drawing such support as they could from endowment funds, parish rates, church tithes, subscriptions, and tuition fees. The support of schools by subscription lists (**R. 240**) was a very common proceeding. Education in England, more than in any other Protestant land, early came to be regarded as a benevolence which the State was under no obligation to support. Only workhouse schools were provided for by the general taxation of all property.

In the Netherlands and in German lands church funds, town funds, and tuition fees were the chief means of support, though here and there some prince had provided for something approaching state support for the schools of his little principality. Frederick the Great had ordered schools established generally (1763) and had decreed the compulsory attendance of children (**R. 274**), but he had depended largely on church funds and tuition fees (§7) for maintenance, with a proviso that the tuition of poor and orphaned children should be paid from "any funds of the church or town, that the schoolmaster may get his income" (§8). In Scotland the church parish school was the prevailing type. In France the religious societies (p. 183) provided nearly all the elementary vernacular religious education that was obtainable.

Beginnings of state control and maintenance. In the Dutch Provinces, in the New England Colonies, and in some of the minor German States and in Switzerland we find the clearest examples of the beginnings of state control and maintenance of elementary schools — something destined to grow rapidly and in the nineteenth century take over the school from the Church and maintain it as a function of the State. The Prussian kings early made grants of land and money for endowment funds and support, and state aid was ordered granted by Maria Theresa for Austria (**R. 274 a**), in 1774. In the New England Colonies the separation of the school from the Church, and the beginnings of state support and control of education, found perhaps their earliest and clearest exemplification. In the other Colonies the lottery was much used (**R. 246**) to raise funds for schools, while church tithes, subscription lists, and school societies after the English pattern also helped in many places to start and support a school or schools.

Only by some such means was it possible in the eighteenth century that the children of the poor could ever enjoy any opportunities for education. The parents of the poor children, themselves uneducated, could hardly be expected to provide what they had never come to appreciate themselves. On the other hand, few of the well-to-do classes felt under any obligation to provide education for children not their own. There was as yet no realization that the diffusion of education contributed to the welfare of the State, or that the ignorance of the masses might be in any way a public peril. This attitude is well shown for England by the fact that not a single law relating to the education of the people, aside from workhouse schools, was enacted by Parliament during the whole of the eighteenth century. The same was true of France until the coming of the Revolution. It is to a few of the German States and to the American Colonies that we must turn for the beginnings of legislation directing school support. This we shall describe more in detail in later chapters.

The Latin Secondary School. The great progress made in education during the eighteenth century, nevertheless, was in elementary education. Concerning the secondary schools and the universities there is little to add to what has previously been said. *During this century* the secondary school, outside of German lands, remained largely stationary. Having become formal and lifeless in its teaching (p. 150), and in England and France crushed by religious-uniformity legislation (p. 172), the Latin grammar school of England and the surviving colleges in France practically ceased to exert any influence on the national life.

Rise of the Academy in America. As we have seen (p. 193), the English Latin grammar school was early (1635) carried to New England, and set up there and elsewhere in the Colonies, but after the close of the seventeenth century its continued maintenance was something of a struggle. Particularly in the central and southern colonies, where commercial demands early made themselves felt, the tendency was to teach more practical subjects. This tendency led to the evolution, about the middle of the eighteenth century, of the distinctively American Academy, with a more practical curriculum, and by the close of the century it was rapidly superseding the older Latin grammar school.

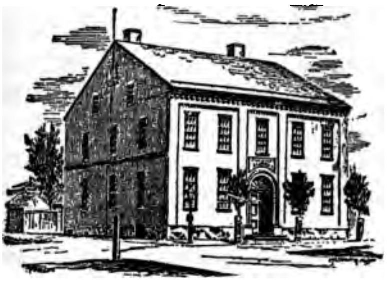

FIG. 58. A PENNSYLVANIA ACADEMY
York Academy, York, Pennsylvania, founded by the Protestant Episcopal Church, in 1787.

Though still deeply religious, these schools usually were free from denominationalism. Though retaining the study of Latin, they made most of new subjects of more practical value. A study of real things rather than words about things, and a new emphasis on the native English and on science were prominent features of their work. They were also usually open to girls, as well as boys, — an innovation in secondary education before almost wholly unknown. Many were organized later for girls only. These institutions were the precursors of the American public high school, itself a type of the most democratic institution for secondary education the world has ever known.

End of the transition period. We have now reached, in our study of the history of educational progress, the end of the transition period which marked the change in thinking from mediæval to modern attitudes. The period was ushered in with the beginnings of the Revival of Learning in Italy in the fourteenth century, and it may fittingly close about the middle of the eighteenth.

We now stand on the threshold of a new era in world history

The same questioning spirit that animated the scholars of the Revival of Learning, now full-grown and become bold and self-confident, is about to be applied to affairs of politics and government, and we are soon to see absolutism and mediæval attitudes in both Church and State questioned and overthrown. New political theories are to be advanced, and the divine right of the people is to be asserted and established in England, the American Colonies, and in France, and ultimately, early in the twentieth century, we are to witness the final overthrow of the divine-right-of-kings idea and a world-wide sweep of the democratic spirit. A new human and political theory as to education is to be evolved; the school is to be taken over from the Church, vastly expanded in scope, and made a constructive instrument of the State; and the wonderful nineteenth century is to witness a degree of human, scientific, political, and educational progress not seen before in all the days from the time of the Crusades to the opening of the nineteenth century. It is to this wonderful new era in world history that we now turn.

QUESTIONS FOR DISCUSSION

1. Contrast a religious elementary school, with the Catechism as its chief textbook, with a modern public elementary school.
2. Contrast the elementary schools of Mulcaster and Comenius.
3. To what extent did the religious teachings of the time support Locke's ideas as to the disciplinary conception of education?
4. Do we to-day place as much emphasis on habit formation as did Locke? On character? On good breeding?
5. State some of the reasons for the noticeable weakening of the hold of the old religious theory as to education, in Protestant lands, by the middle of the eighteenth century.
6. How do you explain the slow evolution of the elementary teacher into a position of some importance? Is the evolution still in process? Illustrate.
7. What were the motives behind the organization of the religious charity-schools?
8. Show how tax-supported workhouse schools represented, for England, the first step in public-school maintenance.
9. Show that teaching under the individual method of instruction was school keeping, rather than school teaching.
10. How do you explain the general prevalence of harsh discipline well into the nineteenth century?
11. Did any other country have, in the eighteenth century, so mixed a type of elementary education as did England? Why was it so badly mixed there?
12. Show how the English Act of Conformity, of 1662, stifled the English Latin grammar schools.
13. What reasons were there for the development of the more practical *Academy in America*, rather than in England?
14. *Compare the American* Academy with the German Realschule.

SELECTED READINGS

In the accompanying *Book of Readings* the following selections, illustrative of the contents of this chapter, are reproduced:

226. Mulcaster: Table of Contents of his *Positions.*
227. Locke: On the Teaching of Latin.
228. Locke: On the Bible as a Reading Book.
229. Coote-Dilworth: Two early "Spelling Books."
230. Webster: Description of Pre-Revolutionary Schools.
231. Raumer: Teachers in Gotha in 1741.
232. Raumer: An 18th Century Swedish People's School.
233. Raumer: Schools of Frankfurt-am-Main during the Eighteenth Century.
234. Krüsi: A Swiss Teacher's Examination in 1793.
235. Crabbe; White; Shenstone: The English Dame School described.
236. Newburgh: A Parochial-School Teacher's Agreement.
237. Saint Anne: Beginnings of an English Charity School.
238. Regulations: Charity-School Organization and Instruction.
    (*a*) Qualifications for the Master.
    (*b*) Purpose and Instruction.
239. Allen and McClure: Textbooks used in English Charity-Schools.
240. England: A Charity-School Subscription Form.
241. Southwark: The Charity-School of Saint John's Parish.
242. Gorsham: An Eighteenth-Century Indenture of Apprenticeship.
243. Indenture: Learning the Trade of a Schoolmaster.
244. Diesterweg: The Schools of Germany before Pestalozzi.
245. England: Free School Rules, 1734.
246. Murray: A New Jersey School Lottery.

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*Birchenough, C. *History of Elementary Education in England and Wales.*
Brown, E. E. *The Making of our Middle Schools.*
Cardwell, J. F. *The Story of a Charity School.*
Davidson, Thos. *Rousseau.*
*Earle, Alice M. *Child Life in Colonial Days.*
Field, Mrs. E. M. *The Child and his Book.*
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Kilpatrick, Wm. H. *Dutch Schools of New Netherlands and Colonial New York.*
Locke, John. *Some Thoughts Concerning Education* (1693).
*Montmorency, J. E. G. de. *Progress of Education in England.*
Montmorency, J. E. G. de. *State Intervention in English Education.*
Mulcaster, Richard. *Positions.* (London, 1581.)
*Paulsen, Friedrich. *German Education, Past and Present.*
*Salmon, David. "The Education of the Poor in the Eighteenth Century"; reprinted from the *Educational Record.* (London, 1908.)
*Scott, J. F. *Historic Essays on Apprenticeship and Vocational Education.* (Ann Arbor, 1914.)

PART IV

MODERN TIMES

⁂

THE ABOLITION OF PRIVILEGE
THE RISE OF DEMOCRACY
A NEW THEORY FOR EDUCATION EVOLVED
THE STATE TAKES OVER THE SCHOOL

CHAPTER XIX

THE EIGHTEENTH A TRANSITION CENTURY

The eighteenth century a turning-point. The eighteenth century, in human thinking and progress, marks for most western nations the end of mediævalism and the ushering-in of modern forms of intellectual liberty. The indifference to the old religious problems, which was clearly manifest in all countries at the beginning of the century, steadily grew and culminated in a revolt against ecclesiastical control over human affairs. This change in attitude toward the old problems permitted the rise of new types of intellectual inquiry, a rapid development of scientific thinking and discovery, the growth of a consciousness of national problems and national welfare, and the bringing to the front of secular interests to a degree practically unknown since the days of ancient Rome. In a sense the general rise of these new interests in the eighteenth century was but a culmination of a long series of movements looking toward greater intellectual freedom and needed human progress which had been under way since the days when *studia generalia* and guilds first arose in western Europe. The rise of the universities in the thirteenth and fourteenth centuries, the Revival of Learning in the fourteenth and fifteenth centuries, the Protestant Revolts in the sixteenth, the rise of modern scientific inquiry in the sixteenth and seventeenth, and Puritanism in England and Pietism in Germany in the seventeenth, had all been in the nature of protests against the mediæval tendency to confine and limit and enslave the intellect. In the eighteenth century the culmination of this rising tide of protest came in a general and determined revolt against despotism in either Church or State, which, at the close of the century, swept away ancient privileges, abuses, and barriers, and prepared the way for the marked intellectual and human and political progress which characterized the nineteenth century.

Significance of the change in attitude. The new spirit and interests and attitudes which came to characterize the eighteenth century in the more progressive western nations meant the ultimate overthrow of the tyranny of mediæval supernatural theology, the evolution of a new theory as to moral action which should be independent of theology, the freeing of the new scientific spirit from the fetters of church control, the substituting of new philosophical and scientific and economic interests for the old theological problems which had for so long dominated human thinking, the substitution of natural political organization for the older ecclesiastical foundations of the State, the destruction of what remained of the old feudal political system, the freeing of the serf and the evolution of the citizen, and the rise of a modern society interested in problems of national welfare — government in the interest of the governed, commerce, industry, science, economics, education, and social welfare. The evolution of such modern-type governments inevitably meant the creation of entirely new demands for the education of the people and for far-reaching political and social reforms.

This new eighteenth-century spirit, which so characterized the mid-eighteenth century that it is often spoken of as the "Period of the Enlightenment," expressed itself in many new directions, a few of the more important of which will be considered here as of fundamental concern for the student of the history of educational progress. In a very real sense the development of state educational systems, in both European and American States, has been an outgrowth of the great liberalizing forces which first made themselves felt in a really determined way during this important transition century. In this chapter we shall consider briefly five important phases of this new eighteenth-century liberalism, as follows:

1. The work of the benevolent despots of continental Europe in trying to shape their governments to harmonize them with the new spirit of the century.
2. The unsatisfied demand for reform in France.
3. The rise of democratic government and liberalism in England.
4. The institution of constitutional government and religious freedom in America.
5. The sweeping away of mediæval abuses in the great Revolution in France.

I. WORK OF THE BENEVOLENT DESPOTS OF CONTINENTAL EUROPE

The new nationalism leads to interested government. In England, as we shall trace a little further on, a democratic form of government had for long been developing, but this democratic life had made but little headway on the continent of Europe.

There, instead, the democratic tendencies which showed some slight signs of development during the sixteenth century had been stamped out in the period of warfare and the ensuing hatreds of the seventeenth, and in the eighteenth century we find autocratic government at its height. National governments to succeed the earlier government of the Church had developed and grown strong, the kingly power had everywhere been consolidated, Church and State were in close working alliance, and the new spirit of nationality — in government, foreign policy, languages, literature, and culture — was being energetically developed by those responsible for the welfare of the States. Everywhere, almost, on the continent of Europe, the theory of the divine right of kings to rule and the divine duty of subjects to obey seemed to have become fixed, and this theory of government the Church now most assiduously supported. Unlike in England and the American Colonies, the people of the larger countries of continental Europe had not as yet advanced far enough in personal liberty or political thinking to make any demand of consequence for the right to govern themselves. The new spirit of nationality abroad in Europe, though, as well as the new humanitarian ideas beginning to stir thinking men, alike tended to awaken a new interest on the part of many rulers in the welfare of the people they governed. In consequence, during the eighteenth century, we find a number of nations in which the rulers, putting themselves in harmony with the new spirit of the time, made earnest attempts to improve the condition of their peoples as a means of advancing the national welfare. We shall here mention the four nations in which the most conspicuous reform work was attempted.

The rulers of Prussia. Three kings, to whom the nineteenth-century greatness of Prussia was largely due, ruled the country during nearly the whole of the eighteenth century. They were fully as despotic as the kings of France, but, unlike the French kings, they were keenly alive to the needs of the people, anxious to advance the welfare of the State, tolerant in religion, and in sympathy with the new scientific studies. The first, Frederick William I (1713–40), labored earnestly to develop the resources of the country, trained a large army, ordered elementary education made compulsory, and made the beginnings in the royal provinces of the transformation of the schools from the control of the Church to the control of the State. His son, known to history *as Frederick the Great,* ruled from 1740 to 1786. During his long reign he labored continually to curtail ancient privileges, abolish old abuses, and improve the condition of his people.

His rule, though, was thoroughly autocratic. "Everything for the people, but nothing by the people," was the keynote of his policies. He had no confidence in the ability of the people to rule, and gave them no opportunity to learn the art. He employed the strong army his father built up to wage wars of conquest, seize territory that did not belong to him, and in consequence made himself a great German hero. He may be said to have laid the foundations of modern militarized, socialized, obediently educated, and subject Germany, and also to have begun the "grand-larceny" and "scrap-of-paper" policy which has characterized Prussian international relationships ever since. Frederick William II, who reigned from 1786 to 1797, continued in large measure the enlightened policies of his uncle, reformed the tax system, lightened the burdens of his people, encouraged trade, emphasized the German tongue, quickened the national spirit, actively encouraged schools and universities, and began that centralization of authority over the developing educational system which resulted in the creation in Prussia of the first modern state school system in Europe. The educational work of these three Prussian kings was indeed important, and we shall study it more in detail in a later chapter (chapter XXII).

The Austrian reformers. Two notably benevolent rulers occupied the Austrian throne for half a century, and did much to improve the condition of the Austrian people. A very remarkable woman, Maria Theresa, came to the throne in 1740, and was followed by her son, Joseph II, in 1780. He ruled until 1790. To Maria Theresa the Austria of the nineteenth century owed most of its development and power. She worked with seemingly tireless energy for the advancement of the welfare of her subjects, and toward the close of her reign laid, as we shall see in a later chapter, the beginnings of Austrian school reform.

Joseph II carried still further his mother's benevolent work, and strove to introduce "enlightenment and reason" into the administration of his realm. A student of the writings of the eighteenth-century reform philosophers, and deeply imbued with the reform spirit of his time, he attempted to abolish ancient privileges, establish a uniform code of justice, encourage education, free the serfs, abolish feudal tenure, grant religious toleration, curb the power of the Pope and the Church, break the power of the local Diets, centralize the State, and "introduce a uniform level of democratic simplicity under his own absolute sway." He attempted to alter the organization of the Church, abolished six hundred monasteries, and reduced the number of monastic persons in his dominion from 63,000 to 27,000. Attempting too much, he brought down upon his head the wrath of both priest and noble and died a disappointed man.

The Spanish reformers. A very similar result attended the reform efforts of a succession of benevolent rulers thrust upon Spain, during the eighteenth century, by the complications of foreign politics. Over a period of nearly ninety years, extending from the accession of Philip V (1700) to the death of Charles III (1788), remarkable political progress was imposed by a succession of able ministers and with the consent of the kings. The power of the Church, always the crying evil of Spain, was restricted in many ways; the Inquisition was curbed; the Jesuits were driven from the kingdom; the burning of heretics was stopped; prosecution for heresy was reduced and discouraged; the monastic orders were taught to fear the law and curb their passions; evils in public administration were removed; national grievances were redressed; the civil service was improved; science and literature were encouraged, in place of barren theological speculations; and an earnest effort was made to regenerate the national life and improve the lot of the common people.

All these reforms, though, were imposed from above, and no attempt was made to introduce schools or to educate the people in the arts of self-government. The result was that the reforms never went beneath the surface, and the national life of the people remained largely untouched. Within five years of the death of Charles III all had been lost. Under a native Spanish king, thoroughly orthodox, devout, and lacking in any broad national outlook, the Church easily restored itself to power, the priests resumed their earlier importance, the nobles again began to exact their full toll, free discussion was forbidden, scientific studies were abandoned, the universities were ordered to discontinue the study of moral philosophy, and the political and social reforms which had required three generations to build up were lost in half a decade. Not meeting any well-expressed need of the people, and with no schools provided to show to the people the desirable nature of the reforms introduced, it was easy to sweep them aside. In this relapse to mediævalism, the chance for

Spain — a country rich in possibilities and natural resources — to evolve early into a progressive modern nation was lost. So Spain has remained ever since, and only in the last quarter of a century has reform from within begun to be evident in this until recently priest-ridden and benighted land.

The intelligent despots of Russia. The greatest of these were Peter the Great, who ruled from 1689 to 1725, and Catherine II, who ruled from 1762 to 1796. Catching something of the new eighteenth-century western spirit, these rulers tried to introduce some western enlightenment into their as yet almost barbarous land. Each tried earnestly to lift their people to a higher level of living, and to start them on the road toward civilization and learning. By a series of edicts, despotically enforced, Peter tried to introduce the civilization of the western world into his country. He brought in numbers of skilled artisans, doctors, merchants, teachers, printers, and soldiers; introduced many western skills and trades; and made the beginnings of western secondary education for the governing classes by the establishment in the cities of a number of German-type *gymnasia*. Later Catherine II had the French philosopher Diderot (p. 278) draw up a plan for her for the organization of a state system of higher schools, but the plan was never put into effect. The beginnings of Russian higher civilization really date from this eighteenth-century work. The power of the formidable Greek or Eastern Church remained, however, untouched, and this continued, until after the Russian revolution of 1917, as one of the most serious obstacles to Russian intellectual and educational progress. The serfs, too, remained serfs — tied to the land, ignorant, superstitious, and obedient.

By the close of the eighteenth century Russia, largely under Prussian training, had become a very formidable military power, and by the close of the nineteenth century was beginning to make some progress of importance in the arts of peace. Just at present Russia is going through a stage of national evolution quite comparable to that which took place in France a century and a quarter ago, and the educational importance of this great people, as we shall point out further on, lies in their future evolution rather than in any contribution they have as yet made to western development.

II. THE UNSATISFIED DEMAND FOR REFORM IN FRANCE

The setting of eighteenth-century France. Eighteenth-century France, on the contrary, developed no benevolent despot to mitigate abuses, reform the laws, abolish privileges, temper the rule of the Church (**R. 247**), curb the monastic orders, develop the natural resources, begin the establishment of schools, and alleviate the hard lot of the serf and the peasant. "I am the State," exclaimed the king, Louis XIV, and the almost unlimited despotism of the King and his ministers and favorites fully supported the statement. Local liberties had been suppressed, and the lot of the common people — ignorant, hard-working, downtrodden, but intensely patriotic — was wretched in the extreme. Approximately 140,000 nobles and 130,000 monks, nuns, and clergy owned two fifths of the landed property of France, and controlled the destinies of a nation of approximately 25,000,000 people.

Church and State were in close working alliance. The higher offices of the Church were commonly held by appointed noblemen, who drew large incomes, led worldly lives, and neglected their priestly functions much as the Italian appointees in German lands had done before the Reformation. A king, constantly in need of money; an idle, selfish, corrupt, nobility and upper clergy, incapable of aiding the king, many of whom, too, had been influenced by the new philosophic and scientific thinking and were willing to help destroy their own orders; an aggressive, discontented, and patriotic bourgeoisie, full of new political and social ideas, and patriotically anxious to reform France; and a vast unorganized peasantry and city rabble, suffering much and resisting little, but capable of a terrible fury and senseless destruction, once they were aroused and their suppressed rage let loose; — these were the main elements in the setting of eighteenth-century France.

The French reform philosophers. During the middle decades of the eighteenth century a small but very influential group of reform philosophers in France attacked with their pens the ancient abuses in Church and State, and did much to pave the way for genuine political and religious reform. In a series of widely read articles and books, characterized for the most part by clear reasoning and telling arguments, these political philosophers *attacked the power of* the absolute monarchy on the one hand,

and the existing privileges of the nobles and clergy on the other, as both unjust and inimical to the welfare of society (**R. 248; 249**). The leaders in the reform movement were Montesquieu (1689–1755), Turgot (1727–81), Voltaire (1694–1778), Diderot (1713–84), and Rousseau (1712–78).

A revolution in French thinking. These five men — Montesquieu, Turgot, Voltaire, Diderot, and Rousseau — and many other less influential followers, portrayed the abuses of the time in Church and State and pointed out the lines of political and ecclesiastical reform. Those who read their writings understood better why the existing privileges of the nobility and clergy were no longer right, and the need for reform in matters of taxation and government. Their writings added to the spirit of unrest of the century, and were deeply influential, not only in France, but in the American Colonies as well. Though the attack was at first against the evils in Church and State, the new critical philosophy soon led to intellectual developments of importance in many other directions.

At the death of Louis XIV (1715) France was intellectually prostrate. Great as was his long reign from the point of view of the splendor of his court, and large as was the quantity of literature produced, his age was nevertheless an age of misery, religious intolerance, political oppression, and intellectual decline. It was a reign of centralized and highly personal government. Men no longer dared to think for themselves, or to discuss with any freedom questions either of politics or religion. "There was no popular liberty; there were no great men; there was no science; there was no literature; there were no arts. The largest intellects lost their energy; the national spirit died away." Between the death of Louis XIV and the outbreak of the French Revolution (1789) an intellectual revolution took place in France, and for this revolution English political progress and political and scientific thinking were largely responsible.

Great English influence on France. In 1715 the English language was almost unspoken in France, English science and political progress were unknown there, and the English were looked down upon and hated. Half a century later English was spoken everywhere by the scholars of the time; the English were looked upon as the political and scientific leaders of Europe; and the scholars of France visited England to study English political, economic, and scientific progress. Locke, an uncompromising advocate of political and religious liberty; Hobbes, the speculative moral philosopher; and the great scientist Newton were the teachers of Voltaire. More than any other single man, Voltaire moulded and redirected eighteenth-century thought in France. In the eighteenth century England became the school for political liberty for France.

The effect of the work of Isaac Newton (p. 208), as popularized by the writings of Voltaire, was revolutionary on a people who had been so tyrannized over by the clergy as had the French during the reign of Louis XIV. An interest in scientific studies before unknown in France now flamed up, and a new generation of French scientists arose. Physics, chemistry, zoölogy, and anatomy received a great new impetus, while botany, geology, and mineralogy were raised to the rank of sciences. Popular scientific lectures became very common. The classics were almost abandoned for the new studies. Economic questions also began to be discussed, such as questions of money, food, finance, and government expenditure.

In the meantime taxes piled up, reforms were refused, the power and arrogance of the clergy and nobility showed no signs of diminution, the nation was burdened with debt, commerce and agriculture declined, the lot of the common people became ever more hard to bear, and the masses grew increasingly resentful and rebellious. As national affairs continued to drift from bad to worse in France, a series of important happenings on the American continent helped to bring matters more rapidly to a crisis. Before describing these events, however, we wish to sketch briefly the rise of government by the people and the extension of liberalism in England — the first great democratic nation of the western world.

III. ENGLAND THE FIRST DEMOCRATIC NATION

Early beginnings of English liberty. The first western nation created from the wreck of the Roman Empire to achieve a measurement of self-government was England. Better civilized than most of the other wandering tribes, at the time of their coming to English shores, the invading Angles, Saxons, and Jutes early accepted Christianity (597–635 A.D.) and settled down to an agricultural life. On English shores they soon built up a for-the-time substantial civilization. This was later largely destroyed by the *pillaging Danes, but with* characteristic energy the English set to work to assimilate the newcomers and build up civilization anew. The work of Alfred in reëstablishing law and order, at a time when law and order scarcely existed anywhere in western Europe, will long remain famous. Later on, and at a time when German and Hun and Slav had only recently accepted Christianity in name and had begun to settle down into rude tribal governments, and when the Prussians in their original home along the eastern Baltic were still offering human sacrifices to their heathen gods, the English barons were extorting *Magna Charta* from King John and laying the firm foundations of English constitutional liberty. In the meadow at Runnymede, on that justly celebrated June day, in 1215, government under law and based on the consent of the governed began to shape itself once more in the western world. Of the sixty-three articles of this Charter of Liberties, three possess imperishable value. These provided:

1. That no free man shall be imprisoned or proceeded against except by his peers, or the law of the land, which secured trial by jury.
2. That justice should neither be sold, denied, nor delayed.
3. That dues from the people to the king could be imposed only with the consent of the National Council (after 1246 known as Parliament).

So important was this charter to such a liberty-loving people as the English have always been, and so bitterly did kings resent its hampering provisions, that within the next two centuries kings had been forced to confirm it no less than thirty-seven times.

By 1295 the first complete Parliament, representative of the three orders of society — Lords, Clergy, and Commons — assembled, and in 1333 the Commons gained the right to sit by itself. From that time to the present the Commons, representing the people, has gradually broadened its powers, working, as Tennyson has said, "from precedent to precedent," until to-day it rules the English nation. In 1376 the Commons gained the right to impeach the King's ministers, and in 1407 the exclusive right to make grants of money for any governmental purpose. Centuries ahead of other nations, this insured an almost continual meeting of the national assembly and a close scrutiny of the acts of both kings and ministers.

In 1604 King James I, imitating continental European precedents, proclaimed his theory as to the "divine right of kings" to *rule, and a struggle* at once set in which carried the English into *Civil War* (1642–49); led to the beheading of Charles I (1649);

the overthrow and banishment of James II (1688); and the ultimate firm establishment, instead, of the "divine right of the common people." In an age when the autocratic power and the divine right of kings to rule was almost unquestioned elsewhere in Europe, the English people compelled their king to recognize that he could rule over them only when he ruled in their interests and as they wished him to do. Though there was a period of struggle later on with the German Georges (I, II, and III), and especially with the honest but stupid George III, England has, since 1688, been a government of and by the people. France did not rid itself of the "divine-right" conception until the French Revolution (1789), and Germany, Austria, and Russia not until 1918.

Growth of tolerance among the English. The results of the long struggle of the English for liberty under law showed itself in many ways in the growth of tolerance among the people of the English nation. At a time when other nations were bound down in blind obedience to king and priest, and when dissenting minorities were driven from the land, the English people had become accustomed to the idea of individual liberty, regulated by law, and to the toleration of opinions with which they did not agree. These characteristically English conceptions of liberty under law and of the toleration of minorities have found expression in many important ways in the life and government of the people (**R. 250**), and have been elements of great strength in England's colonial policy. One of the important ways in which this growth of tolerance among the English showed itself was in the extension of a larger freedom to those unable to subscribe to the state religion.

Though the Reformation movement had stirred up bitter hatreds in England, as on the Continent, the English were among the first of European peoples to show tolerance of opposition in religious matters. The high English State Church, which had succeeded the Roman, had made but small appeal to many Englishmen. The Puritans had early struggled to secure a simplification of the church service and the introduction of more preaching (p. 192), and in the seventeenth century the organization of three additional dissenting sects, which became known as Unitarians, Baptists, and Quakers, took place. These sects divided off rather quietly, and their separation resulted only in the enactment of new laws regarding conformity, prayers, and teaching.

During the latter half of the seventeenth century, after the execution of Charles I (1649), the Puritans had temporarily risen to power, and during their control of affairs had imposed their strict Calvinistic standards as to Sabbath observance and piety on the nation. This was very distasteful to many, and from such strict observances the people in time rebelled. The standards of the English in personal morality, temperance, amusements, and manners at the beginning of the eighteenth century were not especially high, and in the reaction from Puritan control and strict religious observances the great mass of the people degenerated into positive irreligion and gross immorality. Drunkenness, rowdyism, robbery, blasphemy, brutality, lewdness, and prostitution became very common. This moral decline of the people the Church of England seemed powerless to arrest.

New emancipating and educative influences. In 1662 the first regular newspaper outside of Italy was established in England, and in 1702 the first daily paper. Small in size, printed on but one side of the sheet, and dealing wholly with local matters, these nevertheless marked the beginnings of that daily expression of popular opinion with which we are now so familiar. After about 1705 the cheap political pamphlet made its appearance, and after 1710, instead of merely communicating news, the papers began the discussion of political questions.

By 1735 a revolution had been effected in England, and papers and presses began to be established in the chief cities and towns outside of London; the freedom of the press was in a large way completed, and newspapers, for the first time in the history of the world, were made the exponents of public opinion. The press in England in consequence became an educative force of great intellectual and political importance, and did much to compensate for the lack of a general system of schools for the people. In 1772 the right to publish the debates in Parliament was finally won, over the strenuous objections of George III. In 1780 the first Sunday newspaper appeared, "on the only day the lower orders had time to read a paper at all," and, despite the efforts of religious bodies to suppress it, the Sunday paper has continued to the present and has contributed its quota to the education and enlightenment of mankind. In 1785 the famous London *Times* began to appear. In the middle of the eighteenth century debating societies for the consideration of public questions arose, and in 1769 "the first public meeting ever assembled in England, in which it was attempted to enlighten Englishmen respecting their political rights" was held, and such meetings soon became of almost daily occurrence. All these influences stimulated political thinking to a high degree, and contributed not only to a desire for still larger political freedom but for the more general diffusion of the ability to read as well (**R. 250**).

Still other important new influences arose during the early part of the eighteenth century, each of which tended to awaken new desires for schools and learning. In 1678 the first modern printed story to appeal to the masses, Bunyan's *Pilgrim's Progress*, appeared from the press. Written, as it had been, by a man of the people, its simple narrative form, its passionate religious feeling, its picture of the journey of a pilgrim through a world of sin and temptation and trial, and its Biblical language with which the common people had now become familiar — all these elements combined to make it a book that appealed strongly to all who read or heard it read, and stimulated among the masses a desire to read comparable to that awakened by the chaining of the English Bible in the churches a century before (**R. 170**). In 1719 the first great English novel, Defoe's *Robinson Crusoe*, and in 1726 *Gulliver's Travels*, added new stimulus to the desires awakened by Bunyan's book. All three were books of the common people, whereas the dramas, plays, essays, and scholarly works previously produced had appealed only to a small educated class. In 1751 what was probably the first circulating library of modern times was opened at Birmingham, and soon thereafter similar institutions were established in other English cities.

Science and manufacturing; the new era. England, too, from the first, showed an interest in and a tolerance toward the new scientific thinking scarcely found in any other land. This in itself is indicative of the great intellectual progress which the English people had by this time made. At a time when Galileo, in Italy (p. 208), was fighting, almost alone, for the right to think along the lines of the new scientific method and being imprisoned for his pains, Englishmen were reading with deep interest the epoch-making scientific writings of Lord Francis Bacon (p. 209). Earlier than in other lands, too, the Newtonian philosophy found a place in the instruction of the national universities. Popular presentations of what had been worked out by the scientists were sold at the book stalls and by peddlers and were eagerly read; by the beginning of the reign of George III (1760) *they had become very* common. In 1704–10 the first "Dictionary of Arts and Sciences" was printed, and in 1768–71 the first edition (three volumes) of the now famous *Encyclopædia Britannica* appeared. In 1755 the famous British Museum was founded.

As early as 1698 a rude form of steam engine had been patented in England, and by 1712 this had been perfected sufficiently to be used in pumping water from the coal mines. In 1765 James Watt made the real beginning of the application of steam to industry by patenting his steam engine; in 1760 Wedgwood established the pottery industry in England; in 1767 Hargreaves devised the spinning-jenny, which banished the spindle and distaff and the old spinning-wheel; in 1769 Arkwright evolved his spinning-frame; and in 1785 Cartwright completed the process by inventing the power loom for weaving. In 1784 a great improvement in the smelting of iron ores (puddling) was worked out. These inventions, all English, were revolutionary in their effect on manufacturing. They meant the displacement of hand power by machine labor, the breakdown of home industry through the concentration of labor in factories, the rise of great manufacturing cities, and the ultimate collapse of the age-old apprenticeship system of training, where the master workman with a few apprentices in his shop (p. 109) prepared goods for sale. They also meant the ultimate transformation of England from an agricultural into a great manufacturing and exporting nation, whose manufactured products would be sold in every corner of the globe.

By 1750 a change in attitude toward all the old intellectual problems had become marked in England, and by 1775 attention before unknown was being given there to social, political, economic, and educational questions. Religious intolerance was dying out, the harsh laws of earlier days had begun to be modified, new social and political interests were everywhere attracting attention, and the great commercial expansion of England was rapidly taking shape. With England and France leading in the new scientific studies; England in the van in the development of manufacturing and the French to the fore in social influences and polite literature; England and the new American Colonies setting new standards in government by the people; the French theorists and economists giving the world new ideas as to the function of the State; enlightened despots on the thrones of Prussia, Austria, Spain, and Russia; and the hatreds of the hundred years of religious warfare dying out; the world seemed to many, about 1775, as on the verge of some great and far-reaching change in methods of living and in government, and about ready to enter a new era and make rapid advances in nearly all lines of human activity. The change came, but not in quite the manner expected.

IV. INSTITUTION OF CONSTITUTIONAL GOVERNMENT AND RELIGIOUS FREEDOM IN AMERICA

Englishmen in America establish a Republic. Though the early settlement of America, as was pointed out in chapter xv, was made from among those people and from those lands which had embraced some form of the Protestant faith, and represented a number of nationalities and several religious sects, the thirteen colonies, nevertheless, were essentially English in origin, speech, habits, observances, and political and religious conceptions. It was from England, the nation which had done most in the development of individual and religious liberty, that the great bulk of the early settlers of America came, and in the New World the English traditions as to constitutional government and liberty under law were early and firmly established. The centuries of struggle for representative government in England at once bore fruit here. Colony charters, charters of rights and liberties, public discussion, legislative assemblies, and liberty under law were from the first made the foundation stones upon which self-government in America was built up.

From an early date the American Colonies showed an independence to which even Englishmen were scarcely accustomed, and when the home government attempted to make the colonists pay some of the expenses of the Seven Years' War, and a larger share of the expenses of colonial administration, there was determined opposition. Having no representation in Parliament and no voice in levying the tax, the colonists declared that taxation without representation was tyranny, and refused to pay the taxes assessed. Standing squarely on their rights as Englishmen, the colonists were gradually forced into open rebellion. In 1765, and again in 1774, Declarations of Rights were drawn up and adopted by representatives from the Colonies, and were forwarded to the King. In 1774 the first Continental Congress met and formed a union of the Colonies; in 1776 the Colonies declared their independence. This was confirmed, in 1783, by the Treaty of Paris; in *1787, the Constitution* of the United States was drafted; and *in 1789, the American* government began. In the preamble to the twenty-seven charges of tyranny and oppression made against the King in the Declaration of Independence, we find a statement of political philosophy which is a combination of the results of the long English struggle for liberty and the French eighteenth-century reform philosophy and revolutionary demands. This preamble declared:

> We hold these truths to be self-evident — that all men are created equal; that they are endowed by their Creator with certain unalienable rights; that among these are life, liberty, and the pursuit of happiness. That, to secure these rights, governments are instituted among men, deriving their just powers from the consent of the governed; that, whenever any form of government becomes destructive of these ends, it is the right of the people to alter or to abolish it, and to institute a new government, laying its foundation on such principles, and organizing its powers in such form, as to them shall seem most likely to effect their safety and happiness.

American contributions to world history. The American Revolution and its results were fraught with great importance for the future political and educational progress of mankind. Before the close of the eighteenth century the new American government had made at least four important contributions to world liberty and progress which were certain to be of large political and educational value for the future.

In the first place, the people of the Colonies had erected independent governments and had shown the possibility of the self-government of peoples on a large scale, and not merely in little city-states or communities, as had previously been the case where self-government had been tried. Democratic government was here worked out and applied to large areas, and to peoples of diverse nationalities and embracing different religious faiths. The possibility of States selecting their rulers and successfully governing themselves was demonstrated.

In the second place, the new American government which was formed did something new in world history when it united thirteen independent and autonomous States into a single federated Nation, and without destroying the independence of the States. What was formed was not a league, or confederacy, as had existed at different times among differing groups of the Greek City-States, and from time to time in the case of later Swiss and temporary European national groupings, but the union into a substantial and permanent Federal State of a number of separate States which still retained their independence, and with provision for the expansion of this national Union by the addition of new States. This federal principle in government is probably the greatest political contribution of the American Union to world development. In the twentieth-century conception of a League of Nations it has borne still further fruit.

In the third place, the different American States changed their old Colonial Charters into definite written Constitutions, each of which contained a Preamble or Bill of Rights which affirmed the fundamental principles of democratic liberty (**R. 251**). These now became the fundamental law for each of the separate States, and the same idea was later worked out in the Constitution of the United States. These were the first written constitutions of history, and have since served as a type for the creation of constitutional government throughout the world. In such documents to-day free peoples everywhere define the rights and duties and obligations which they regard as necessary to their safety and happiness and welfare.

Finally, the new Federal Constitution provided for the inestimable boon of religious liberty, and in a way that was both revolutionary and wholesome. The complex religious problem of America had to be met by the Constitutional Convention, and this body handled it in the only way it could have been intelligently handled in a nation composed of so many different religious sects as was ours. It simply incorporated into the Federal Constitution provisions which guaranteed the free exercise of their religious faith to all, and forbade the establishment by Congress of any state religion, or the requirement of any religious test as a prerequisite to holding any office under the control of the Federal Government. The American people thus took a stand for religious liberty at a time when the hatreds of the Reformation still burned fiercely, and when tolerance in religious matters was as yet but little known.

Importance of the religious-liberty contribution. The solution of the religious question arrived at was only second in importance for us to the establishment of the Federal Union, and the far-reaching significance to our future national life of the sane and for-the-time extraordinary provisions incorporated into our National Constitution can hardly be overestimated. This action led to the early abandonment of state religions, religious tests, and public taxation for religion in the old States, and to the prohibition of these in the new. The importance of this solution of the religious question for the future of popular education in the United States was great, for it laid the foundations upon which our systems of free, common, public, tax-supported, non-sectarian schools have since been built up. How we could have erected a common public-school system on a religious basis, with the many religious sects among us, it is impossible to conceive.

How much the American people owe to the Fathers of the Republic for this most enlightened and intelligent provision, few who have not thought carefully on the matter can appreciate. To it we must trace not only the great blessing of religious liberty, which we have so long enjoyed, but also the final establishment of our common, free, public-school systems. The beginning of the new state motive for education, which was soon to supersede the religious motive, dates from the establishment with us of republican governments; and the beginning of the emancipation of education from church domination goes back to this wise provision inserted in our National Constitution.

This national attitude was later copied in the state constitutions, and as a preamble to practically all we find a Bill of Rights, which in almost every case included a provision for freedom of religious worship (**Rs. 251, 260**). After the middle of the nineteenth century a further provision prohibiting sectarian teaching or state aid to sectarian schools was everywhere added.

V. THE FRENCH REVOLUTION SWEEPS AWAY ANCIENT ABUSES

New demands for reform that could not be resisted. More than in any other continental European country France had, by 1783, become a united nation, conscious of a modern national feeling. Yet in France mediæval abuses in both State and Church had survived, as we have seen, to as great an extent almost as in any European nation. So determined were the clergy and nobility to retain their old powers, not only in France but throughout the continent of Europe as well, that progressive reform seemed well-nigh impossible. The work of the benevolent despots had, after all, been superficial. By the last quarter of the eighteenth, though, a progressive change was under way which was certain to produce either evolution or revolution. The influence of the American experiment in nation-building now became pronounced. In 1779 Franklin took a copy of the new Pennsylvania Constitution with him to Paris, and in 1780 John Adams did the same with the Massachusetts Constitution. Frenchmen instantly recognized here, in concrete form, the ideas with which their own heads were filled. In 1783 Franklin published in France a French translation of all the American Constitutions, and the National Constitution of 1787 was as eagerly read and discussed in Paris as in New York or Philadelphia or Boston. America appeared to the French of that stormy period as an ideal land, where the dreams of Rousseau about the social contract had been transformed into realities. Two years later the *cahiers* of the Third Estate demanded a written constitution for France. The French, too, had aided the American Colonies in their struggle for liberty, and French soldiers returning home carried back new political ideas drawn from the remarkable political progress of the new American Nation. By 1788 the demand for reform in France had become so insistent, and the condition of the treasury of the State was so bad, that it was finally felt necessary to summon a meeting of the States-General — a sort of national parliament consisting of representatives of the three great Estates: clergy, nobility, and commons — which had not met in France since 1614.

France establishes constitutional government. The States-General met May 5, 1789, and soon (June 20) resolved itself into the National or Constituent Assembly. Terrified by the uprisings and burnings of châteaux throughout France, on the night of August fourth, in a few hours, it adopted a series of decrees which virtually abolished the *Ancien Régime* of privileges for France. The nobility gave up most of their old rights, the serfs were freed, and the special privileges of towns were surrendered. Later the Assembly adopted a "Declaration of Rights of Man and of the Citizen" (**R. 253**), much like the American Declaration of Independence. This declared, among other things, that all men were born free and have equal rights, that taxes should be proportional to wealth, that all citizens were equal before the law and have a right to help make the laws, and that the people of the nation were sovereign. These principles struck at the very foundations of the old system.

Soon a Constitution for France, the first ever promulgated in modern Europe, was prepared and adopted (1791). This abolished the ancient privileges and reorganized France as a self-governing nation, much after the American plan. Local government was created, and the absolute monarchy was changed to a limited constitutional one. Next the property of the Church was taken over by the State, the monasteries were suppressed, and the priests and bishops were made state officials and paid a fixed state salary. The Jesuits had been expelled from France in 1764; and in 1792 the Brothers of the Christian Schools were not allowed longer to teach. Among other important matters, the Constitution of 1791 declared that:

> There shall be created and organized a system of public instruction common to all citizens, and gratuitous, with respect to those branches of instruction which are indispensable for all men.

Up to this point the Revolution in France had proceeded relatively peacefully, considering the nature of the long-standing abuses which were to be remedied. In August, 1792, the King was imprisoned, and in January, 1793, he was executed and a Republic proclaimed. Then followed a reign of terror, which we do not need to follow, and which ended only when Napoleon became master of France.

Beneficent results of the Revolution. The French Revolution was not an accident or a product of chance, but rather the inevitable result of an attempt to dam up the stream of human progress and prevent its orderly onward flow. The Protestant Revolts were the first great revolutionary wave, the Puritan revolution in England was another, the formation of the American Republic and the institution of constitutional government and religious freedom another, while the French Revolution brought the rising movement to a head and swept away, in a deluge of blood, the very foundations of the mediæval system. Along with much that was disastrous, the French Revolution accomplished after all much that was of greatest importance for human progress. The world at times seems to be in need of such a great catharsis. Progress was made in a decade that could hardly have been made in a century by peaceful evolution. The old order of privilege came to an end, mediævalism was swept away, and the serf was evolved into the free farmer and citizen. One fifth of the soil of France was restored to the use of the people from the monasteries, and an additional one third from the Church and nobility. The new principles of citizenship — Liberty, Equality, and Fraternity — were for France revolutionary in the extreme, while the assertion that the sovereignty of a nation rests with the people rather than with the king, here successfully promulgated, ended for all time the "divine-right-of-kings" idea for France. After political theory had for a time run mad, the organizing genius of

Napoleon consolidated the gains, gave France a strong government, a uniform code of laws, and began that organization of schools for the nation which ultimately meant the taking over of education from the Church and its provision at the expense of and in the interests of the nation.

The national idea extends to other lands. The reform work in France, together with the examples of English and American liberty, soon began to have their influence in other lands as well. People everywhere began to see that the old régime of privilege and misgovernment ought to be replaced. Other countries abolished serfdom, introduced better laws, and made reforms in the abuses of both Church and State. French armies and rulers carried the best of French ideas to other lands, and, where the French rule continued long enough, these ideas became fixed. In particular was the *Code Napoléon* copied in the Netherlands, the Italian States, and the States of southern and western Germany. The national spirit of Italy was awakened, and the Italian liberals began to look forward to the day when the small Italian States might be reunited into an Italian Nation, with Rome as its capital. This became the work of nineteenth-century Italian statesmen. For the first time in Spanish history, too, the people became conscious, under French occupation, of a feeling of national unity, and similarly the national spirit of German lands was stirred by the conquests of Napoleon.

Important consequences of the democratic movement. Since the closing decades of the eighteenth century, when democratic government and written constitutions began, the sweep of democratic government has become almost world wide. Nation after nation has changed to democratic and constitutional forms of government, the latest additions being Portugal (1911), China (1912), Russia (1917), and Germany (1918). New English colonies, too, have carried English self-government into almost every continent. The World War of 1914–18 gave a new emphasis to democracy, and there is good reason to believe that government of and by and for the people is ultimately destined to prevail among all the intelligent nations and races of the earth.

With the development of democratic government there has everywhere been a softening of old laws, the growth of humanitarianism, the wider and wider extension of the suffrage, important legislation as to labor, a previously unknown attention to the poor *and the dependents* of society, a vast extension of educational advantages, and the taking over of education from the Church by the State and the erection of the school into an important institution for the preservation and advancement of the national welfare. These consequences of the onward sweep of new-world ideas we shall trace more in detail in the chapters which follow.

QUESTIONS FOR DISCUSSION

1. Show the importance, for human progress, of each of the meanings of the new eighteenth-century liberalism, as enumerated on pages 253–54.
2. How do you explain the lack of any permanent influence on Spanish life of the work of the benevolent despots in Spain?
3. Show the liberalizing influence of the rise of scientific investigation and economic studies, for a nation still oppressed by mediævalism and bad government.
4. Enumerate the new sciences which arose in the eighteenth century.
5. Indicate the importance of the freedom of the press in the development of English political liberty.
6. Explain how the religious-freedom attitude of the American national constitution conferred an inestimable boon on the States in the matter of public education.

SELECTED READINGS

In the accompanying *Book of Readings* the following illustrative selections are reproduced:

247. Dabney: Ecclesiastical Tyranny in France.
248. Voltaire: On the Relation of Church and State.
249. Rousseau: Extract from the Social Contract.
250. Buckle: Changes in English Thinking in the Eighteenth Century.
251. Pennsylvania Constitution: Bill of Rights in.
252. Clergy of Blois: *Cahier* of 1779.
253. France: Declaration of the Rights of Man.

SUPPLEMENTARY REFERENCES

*Dabney, R. H. *The Causes of the French Revolution.*
Taine, H. A. *The Ancient Régime.*

CHAPTER XX

THE BEGINNINGS OF NATIONAL EDUCATION

I. NEW CONCEPTIONS OF THE EDUCATIONAL PURPOSE

The State as servant of the Church. With the rise of the Protestant sects we noted, in the fifteenth and sixteenth centuries, and for the first time since Christianity became supreme in the western world, the beginnings of a state connection with the education of the young. The Protestant reformers, obtaining the support of the Protestant princes and kings, had successfully used this support to assist them in the organization of church schools as an aid to the reformed faith. In all Protestant lands we saw that the reformers appealed, from time to time, to what were then the servants of the churches — the rising civil governments and principalities and States — to use their civil authority to force the people to meet their new religious obligations in the matter of schooling.

The purpose of the schooling ordered established, however, was almost wholly religious. Massachusetts, in ordering instruction in the "capital laws of the country," as well as reading and religion, had formed a marked exception. In nearly all lands the rising state governments merely helped the Protestant churches to create the elementary vernacular religious school, and to make of it an auxiliary for the protection of orthodoxy and the advancement of the faith. This condition continued until well toward the middle of the eighteenth century.

The new state theory of education. After about the middle of the eighteenth century a new theory as to the purpose of education, and one destined to make rapid headway, began to be advanced. This theory had already made marked progress, as we shall see, in the New England Colonies, and had also found expression, as we shall also see in a later chapter, in the organizing work of Frederick the Great in Prussia. It was from the French political philosophers of the eighteenth century, though, that its clearest definition came. They now advanced the idea that schools were essentially civil affairs, the purpose of which should be to promote the everyday interests of society and the welfare of the State, rather than the welfare of the Church, and to prepare for a *life here rather than* a life hereafter.

The outcome was the rise of a new national and individual conception of the educational purpose. This was destined in time to spread to other lands and to lead to the rise of complete state school systems, financed and managed by the State and conducted for state ends, and to the ultimate divorce of Church and State, in all progressive lands, in the matter of the education of the young. Teachers trained and certificated by the State were in time to supplant the nuns and brothers of the religious congregations in Catholic lands, as well as teachers who served as assistants to the pastors in Protestant lands and whose chief purpose was to uphold the teachings and advance the interests of the sect; citizens were to supplant the ecclesiastic in the supervision of instruction; and the courses of instruction were to be changed in direction and vastly broadened in scope to make them minister to the needs of the State rather than the Church, and to prepare pupils for useful life here rather than for life in another world.

II. THE NEW STATE THEORY IN FRANCE

FIG. 59. ROUSSEAU (1712–78)

The French political theorists. The leading French political theorists of the two decades between 1760 and 1780 now began to discuss education as in theory a civil affair, intimately connected with the promotion of the welfare of the State. The more important of these, and their chief ideas were:

1. *Rousseau.* The first of the critical and reformatory pedagogical writers to awaken any large interest and obtain a general hearing was Jean-Jacques Rousseau. The same year (1762) that his *Social Contract* appeared and attacked the foundations of the old political system his *Émile* also appeared and attacked with equal vigor the religious and social theory as to education then prevailing throughout western Europe. For the stiff and unnatural methods in education, under which children were dressed and made to behave as adults, the harsh discipline of the time, and the excessive emphasis on religious instruction and book education, he preached the substitution of life amid nature, childish ways and sports, parental love, and an education that considered the instincts and natural development of children.

Gathering up the political and social ideas of his age as to ecclesiastical and political despotism; the nature of the social contract; that the "state of nature" was the ideal one, and the one in which men had been intended to live; that human duty called for a return to the "state of nature," whatever that might be; and that the artificiality and hypocrisy of his age in manners, dress, religion, and education were all wrong — Rousseau restated his political philosophy in terms of the education of the boy, Émile. Despite its many exaggerations, much faulty reasoning, and many imperfections, the book had a tremendous influence upon Europe in laying bare the limitations and defects and abuses of the formal and ecclesiastical education of the time. He may be regarded as the first important writer to sap the foundations of the old system of religious education, and to lay a basis for a new type of child training (**R. 254**).

FIG. 60. LA CHALOTAIS (1701–83)

2. *La Chalotais*. The year following the publication of Rousseau's *Émile* appeared La Chalotais's *Essai d'éducation nationale* (1763). La Chalotais produced a practical and philosophical discussion of the problem of the education of a people. Declaring firmly that education was essentially a civil affair; that it was the function of government to make citizens contented by educating them for their sphere in society; that citizen and secular teachers should not be excluded for celibates; that the real purpose of education should be to prepare citizens for France; that the poor were deserving of education; and that "the most enlightened people will always have the advantage" in the struggles of a modern world, La Chalotais produced a work which was warmly approved by such political philosophers as Voltaire, Diderot, and Turgot, and which was translated into several European languages (**R. 255**).

FIG. 61. ROLLAND (1734–93)

3. *Rolland.* In 1768 Rolland, president of the Parliament of

Paris, presented to his colleagues a report in which he outlined a national system of education to replace both the schools of the Jesuits and those of the Brothers of the Christian Schools. La Chalotais had proposed a more modern system of state schools chiefly to replace those of the Jesuits, but Rolland went further and proposed the extension of education to all, and the supervision of all schools by a central council of the Government.

4. *Turgot.* In 1774 Turgot was appointed Minister of Finance (p. 260), and in 1775 he made a series of recommendations to the King in which he set forth ideas analogous to those of Rolland, and presented an eloquent plea for the formation of a national council of public instruction and the establishment of a system of civil and national education for the whole of France.

FIG. 62. DIDEROT (1713–84)

5. *Diderot.* In 1776 Diderot, editor with D'Alembert of the *Encyclopædia* (1751–72), prepared, at the request of Catherine II (p. 258), under the title of *Plan of a University*, a complete scheme for the organization of a state system of public instruction for Russia. Though the plan was never carried out, it was printed and much discussed in France, and is important as coming from one of the most influential Frenchmen. For Russia he outlines first a system of people's schools, which shall be free and obligatory for all, and in which instruction in reading, writing, arithmetic, morals, civics, and religion shall be taught. "From the Prime Minister to the lowest peasant," he says, "it is good for every one to know how to read, write, and count." For the series of secondary schools to be established, he condemns the usual practice of devoting so much of the instruction to the humanities and a mediæval type of logic and ethics, and urges instead the introduction of instruction in mathematics, in the modern sciences, literature, and the work of governments. Classical studies he would confine to the last years of the course. Science, history, drawing, and music find a place in his scheme.

All this instruction Diderot would place under the supervisory control of an administrative bureau to be known as the *University of Russia*, at the head of which should be a statesman, who should exercise control of all the work of public instruction beneath

Though never carried out in Russia, the University of France of 1808 is largely an embodiment of the ideas he proposed in 1776.

Legislative proposals to embody these ideas. During the quarter of a century between the publication of Rousseau's *Émile* and the summoning of the States-General to reform France (1762–88), the educational as well as the political ideas of the French reformers had taken deep root with the thinking classes of the nation. The *cahiers* of 1789, of all Orders (p. 271), gave evidence of this in their somewhat general demand for the creation of some form of an educational system for France (**R. 252**). From the first days of the Revolution pedagogical literature became plentiful, and the successive National Assemblies found time, amid the internal reorganization of France, constitution-making, the troubles with and trial of the King, and the darkening cloud of foreign intervention, to listen to reports and addresses on education and to enact a bill for the organization of a national school system. The more important of these educational efforts were:

1. *The Constituent Assembly* (June 17, 1789, to September 30, 1791). In the Constituent Assembly, into which the States-General resolved itself, June 17, 1789, and which continued until after it had framed the constitution of 1791, two notable addresses and one notable report on the organization of education were made. The Count de Mirabeau, a nobleman turned against his class and elected to the States-General as a representative of the Third Estate, made addresses on the "Organization of a Teaching Body," and on the "Organization of a National *Lycée*." In the first he advocated the establishment of primary schools throughout France. In the second he proposed the establishment of colleges of literature in each department, with a National *Lycée* at Paris for higher (university) education, and to contain the essentials of a national normal school or teachers' college as well.

FIG. 63.
COUNT DE MIRABEAU
(1749–91)

Mirabeau's proposals represent rather a transition in thinking from the old to the new, but the Report of Talleyrand (1791), former Bishop of Autun, now turned revolutionist, embodies the full *culmination* of revolutionary educational thought. Public instruction he termed "a power which embraces everything, from the games of infancy to the most imposing fêtes of the Nation." He definitely proposed the organization of a complete state system of public instruction for France, to consist of a primary school in every canton (community, district), open to the children of peasants and workmen — classes heretofore unprovided with education; a secondary school in every department (county); a series of special schools in the chief French cities, to prepare for the professions; and a National Institute, or University, to be located at Paris. Inspired by Montesquieu's principle that "the laws of education ought to be relative to the principles of government," Talleyrand proposed a bill designed to give effect to the provisions of the Constitution of 1791 relating to education, and to provide an education for the people of France who were now to exercise, through elected representatives, the legislative power for France. Instruction he held to be the necessary counterpoise of liberty, and every citizen was to be taught to know, obey, love, and protect the new constitution. Political, social, and personal morality were to take the place of religion in the cantonal schools, which were to be free and equally open to all. As the Constituent Assembly was succeeded by the newly elected Legislative Assembly within three weeks after Talleyrand submitted his Report, no action was taken on his bill.

FIG. 64. TALLEYRAND (1758–1838)

2. *The Legislative Assembly* (October 1, 1791, to September 21, 1792). This new legislative body was far more radical in character than its predecessor, and far more radical than was the sentiment of France at the time. Among other acts it abolished (1792) the old universities and confiscated (1793) their property to the State. To it was submitted (April 20–21, 1792) by the mathematician, philosopher, and revolutionist, Marquis de Condorcet, on behalf of the Committee on Public Instruction and as a measure of reconstruction, a Report and draft of a Law for the organization of a complete democratic system of public instruction for France (R. 256). It provided for the organizing of a primary school for every four hundred inhabitants, in which

FIG. 65. CONDORCET (1743–94)

FIG. 66. THE INSTITUTE OF FRANCE
Founded by Article 298 of the Constitution of Year III (1793)

each individual was "to be taught to direct his own conduct and to enjoy the plenitude of his own rights," and where principles would be taught, calculated to "insure the perpetuation of liberty and equality." The bill also provided, for the first time, for the organization of higher primary schools in the principal towns; colleges (secondary schools) in the chief cities (one for every four thousand inhabitants); a higher school for each "department"; *Lycées*, or institutions of still higher learning, at nine places in France; and a National Society of Sciences and Arts to crown the educational system at Paris. The national system of education he proposed was to be equally open to women, as well as men, and to be gratuitous throughout. Teachers for each grade of school were to be prepared in the school next above. Sunday lectures for workingmen and peasants were to be given by teachers everywhere. Public morality, political intelligence, human progress, and the preservation of liberty and equality were the aims of the instruction. The necessity for education in a constitutional government he saw clearly. "A free constitution," he writes, "which should not be correspondent to the universal instruction of citizens, would come to destruction after a few conflicts, and would degenerate into one of those forms of government which cannot preserve the peace among an ignorant *and corrupt people.*" Anarchy or despotism he held to be the future for peoples who become free without being enlightened. The bill proposed by Condorcet, while too ambitious for the France of his day, was thoroughly sound as a democratic theory of education, and an accurate prediction of what the nineteenth century brought generally into existence. Condorcet's Report was discussed, but not acted upon.

3. *The National Convention* (September 21, 1792, to October 26, 1795). The Convention was also a radical body, deeply interested in the creation of a system of state schools for the people of France. To higher education there was for a time marked opposition, though later in its history the Convention erected a number of important higher technical institutions and schools, among the most important of which was the Institute of France. There was also in the Convention marked opposition to all forms of clerical control of schools. The schools of the Brothers of the Christian Schools were suppressed by it, in 1792, and all secular and endowed schools and colleges were abolished and their property confiscated, in 1793. The complete supremacy of the State in all educational matters was now asserted. Great enthusiasm was manifested for the organization of state primary schools, which were ordered established in 1793 (**R. 258 a**), and in these:

> Children of all classes were to receive that first education, physical, moral, and intellectual, the best adapted to develop in them republican manners, patriotism, and the love of labor, and to render them worthy of liberty and equality.
>
> The course of instruction was to include: "to speak, read, and write correctly the French language; the geography of France; the rights and duties of men and citizens; the first notions of natural and familiar objects; the use of numbers, the compass, the level, the system of weights and measures, the mechanical powers, and the measurement of time. They are to be taken into the fields and the workshops where they may see agricultural and mechanical operations going on, and take part in the same so far as their age will allow."

What a change from the course of instruction in the religious schools just preceding this period!

A multiplicity of reports, bills, and decrees, often more or less contradictory but still embodying ideas advanced by Condorcet and Talleyrand, now appeared. Whereas the preceding legislative bodies had considered the subject carefully, but without taking action, the Convention now acted. The nation, though, was so engrossed by the internal chaos and foreign aggression that there was neither time nor funds to carry the decrees into effect.

The most extreme proposal of the period was the bill of Lepelletier le Saint-Fargeau to create a national system of education modeled closely after that of ancient Sparta. The best of the proposals probably was the Lakanal Law, of November 17, 1794, which ordered a school for every one thousand inhabitants, with special divisions for boys and girls, and which provided for instruction in:

1. Reading and writing the French language.
2. The Declaration of the Rights of Man, and the Constitution.
3. Lessons on republican morals.
4. The rules of simple calculation and surveying.
5. Lessons in geography and the phenomena of nature.
6. Lessons on heroic actions, and songs of triumph.

The law of October 25, 1795, closed the work of the Convention. This made less important provisions for primary education (**R. 258 b**) than had preceding bills, but was the only permanent contribution of this period to the organization of primary schools. It placed greater emphasis than had the legislative Assembly on the creation of secondary and higher institutions (**R. 258 a**), of more value to the bourgeois class. This bill of 1795 represents a reaction from the extreme republican ideas of a few years earlier, and the triumph of the conservative middle-class elements in the nation over the radical republican elements previously in control.

FIG. 67. LAKANAL (1762–1845)

The Convention also, in the latter part of its history, created a number of higher technical institutions of importance, which were expressive alike of the French interest in scientific subjects which arose during the latter part of the eighteenth century, and of the new French military needs. Many of these institutions have persisted to the present, so well have they answered the scientific interests and needs of the nation. A mere list of the institutions created is all that need be given. These were:

Museum or Conservatory of Arts (Jan. 16, 1794).
Conservatory of Arts and Trades (Oct. 10, 1794).
New medical schools (*Schools of Health*) ordered (Dec. 4, 1794).
Museum of Natural History (Dec. 11, 1794).

Central Schools to succeed the former Colleges (secondary schools) (Feb. 25, 1795).
School of Living Oriental Languages (March 30, 1795).
Veterinary Schools (April 21, 1795).
Course in Archæology, National Library (June 8, 1795).
Bureau of Longitude (June 29, 1795).
Conservatory of Music (Aug. 3, 1795).
The National Library (Oct. 17, 1795).
Museum of Archæological Monuments (Oct. 20, 1795).
Polytechnic Schools (**R. 257**); School of Civil Engineering; School of Hydrographic Engineers; and School of Mining (Oct. 22, 1795).

The Convention also adopted the metric system of weights and measures; enacted laws under which the peasants could acquire title to the lands they had tilled for so long; and began the unification of the laws of the different parts of the country into a single set, which later culminated in the *Code Napoléon.*

4. *The Directory* (1795–99) *and the Consulate* (1799–1804). The Revolution had by this time largely spent itself, the Directory followed, and in 1799 Napoleon became First Consul and for the next sixteen years was master of France. The Law of 1795 for primary schools (**R. 258 b**) was but feebly administered under the Directory, as foreign wars absorbed the energies and resources of the Government. Napoleon's chief educational interest, too, was in opening up opportunities for talent to rise, in encouraging scientific work and higher specialized institutions, and in developing schools of a type that would support the kind of government he had imposed upon France. The secondary and higher schools he established and promoted cost him money at a time when money was badly needed for national defense, and primary education was accordingly neglected during the time he directed the destinies of the nation.

The Revolutionary enthusiasts had stated clearly their theory of republican education, but had failed to establish a permanent state school system according to their plans. This now became the work of the nineteenth century. In the meantime, in the new United States of America the same ideas were taking shape and finding expression, and to the developments there we next turn.

III. THE NEW STATE THEORY IN AMERICA

Waning of the old religious interest. As early as 1647 Rhode Island Colony had enacted the first law providing for freedom of *religious* worship ever enacted by an English-speaking people, and two years later Maryland enacted a similar law. Though the Maryland law was later repealed, and a rigid Church-of-England rule established there, these laws were indicative of the new spirit arising in the New World. By the beginning of the eighteenth century a change in attitude toward the old problem of personal salvation had become evident. Frontier conditions; the gradual rise of a civil as opposed to a religious form of town government; the rising interests in trade and shipping; the beginnings of the breakdown of the old aristocratic traditions and customs transplanted from Europe; the rising individualism in both Europe and America — these all helped to weaken the hold on the people of the old religious doctrines.

By 1750 the change in religious thinking in the American Colonies had become quite marked. The day of the monopoly of any sect in a Colony was over. New secular interests began to take the place of religion as the chief topic of thought and conversation, and secular books began to dispute the earlier predominance of the Bible. A few colonial newspapers had begun (seven by 1750), and these became expressive of the new colony interests.

Changing character of the schools. These changes in attitude toward the old religious problems materially affected both the support and the character of the education provided in the Colonies. The Law of 1647, requiring the maintenance of the Latin grammar schools, had been found to be increasingly difficult of enforcement, not only in Massachusetts, but in all the other New England Colonies which had followed the Massachusetts example. With the changing attitude of the people, which had become clearly manifest by 1750, the demand for relief from the maintenance of this school in favor of a more practical and less aristocratic type of higher school, if higher school were needed at all, became marked. By the close of the colonial period the new American Academy (p. 248), with its more practical studies, had begun to supersede the old Latin grammar school.

The elementary school experienced something of the same difficulties. Many of the parochial schools died out, while others declined in character and importance. In Church-of-England Colonies all elementary education was left to private initiative and philanthropic and religious effort (p. 241). In the southern Colonies the classes in society and the character of the plantation life made common schools impossible, and the feeling of any need for elementary schools almost entirely died out. In New England the eighteenth century was a continual struggle on the one hand to prevent the original religious town school from disappearing, and on the other to establish in its place a series of scattered and inferior district schools, while either church or town support and tuition fees became ever harder to obtain. Among other changes of importance the reading school and the writing school now became definitely united, in all the smaller places and in the rural districts, as a measure of economy, to form the American school of the "3 Rs." New textbooks, too, containing less of the gloomily religious than the *New England Primer*, and secular rather than religious in character (p. 235), appeared after 1750 and began to be used in the schools. After 1750, too, it was increasingly evident that the old religious enthusiasm for schools had largely died out; that European traditions and ways and types of schools no longer completely satisfied; and that the period of the transplanting of European educational ideas and schools and types of instruction was coming to an end. Instead, the evolution of a public or state school out of the original religious school, and the beginnings of the evolution of distinctly American types of schools, better adapted to American needs, became increasingly evident in the Colonies as the eighteenth century progressed.

When our national government and the different state governments were established, the States were ready to accept, in principle at least, the theory gradually worked out in New England that schools are state institutions, and should be under the control of the State.

Many of the older States enacted general state school laws early in their history (**R. 262**). Connecticut continued the general school laws of 1700, 1712, and 1714 unchanged, and in 1795 added $1,200,000, derived from land sales, to a permanent state school endowment fund, created as early as 1750. Vermont enacted a general school law in 1782. Massachusetts and New Hampshire enacted new general school laws, in 1789, which restated and legalized the school development of the preceding hundred and fifty years. All these required the maintenance of schools by the towns for a definite term each year, ordered taxation, and fixed the school studies required by the State. New York, in 1784, created an administrative organization, known as the University of the State of New York, to supervise secondary and higher education throughout the State — an institution clearly modeled after the centralizing ideas of Condorcet, Rolland, and Diderot (p. 278), and very similar to the ideas proposed by Talleyrand and Condorcet and later (1808) embodied in the University of France by Napoleon. In 1795 New York also provided for a state system of elementary education. Georgia created a state system of academies, as early as 1783. Delaware created a state school fund, in 1796, and Virginia enacted an optional school law the same year. North Carolina created a state university, as early as 1795.

The new political motive for schools. We thus see, in the new United States, the theories of the French revolutionary thinkers and statesmen actually being realized in practice. The constitutional provisions, and even the legislation, often were in advance of what the States, impoverished as they were by the War of Independence, could at once carry out, but they mark the evolution in America of a clearly defined state theory as to education, and the recognition of a need for general education in a government whose actions were so largely influenced by the force of public opinion. The Federal Constitution had extended the right to vote for national officers to all, and the older States soon began to remove their earlier property qualifications for voting and to extend general manhood suffrage to all citizens.

FIG. 68. THOMAS JEFFERSON (1743–1826)

This new development in government by the people, which meant the passing of the rule of a propertied and educated class and the establishment of a real democracy, caused the leading American statesmen to turn early to general education as a necessity for republican safety. In his Farewell Address to the American people, written in 1796, Washington said:

> Promote, then, as an object of primary importance, institutions for the general diffusion of knowledge. In proportion as the structure of a government gives force to public opinion, it is essential that public opinion should be enlightened.

Jefferson spent the years 1784 to 1789 in Paris, and became a great *propagandist* in America for French political ideas.

Writing to James Madison from France, as early as 1787, he said:

> Above all things, I hope the education of the common people will be attended to; convinced that on this good sense we may rely with the most security for the preservation of a due sense of liberty.

In 1779, then, as a member of the Virginia legislature, Jefferson tried unsuccessfully to secure the passage of a comprehensive bill (**R. 263**), after the plan of the French Revolutionary proposals, for the organization of a complete system of public education for Virginia.

Though the scheme failed of approval, Jefferson never lost interest in the education of the people for intelligent participation in the functions of government. Writing from Monticello to Colonel Yancey, in 1816, after his retirement from the presidency, he wrote:

> If a nation expects to be ignorant and free in a state of civilization it expects what never was and never will be. . . . There is no safe deposit (for the functions of government) but with the people themselves; nor can they be safe with them without information.

In 1819 the founding of the University of Virginia crowned Jefferson's efforts for education by the State. This institution, the Declaration of Independence, and the statute for religious freedom in Virginia, stand to-day as the three enduring monuments to his memory.

Other of the early American statesmen expressed similar views as to the importance of general education by the State.

Having founded, as Lincoln so well said later at Gettysburg, "on this continent a new nation, conceived in liberty, and dedicated to the proposition that all men are created equal," and having built a constitutional form of government based on that equality, it in time became evident to those who thought at all on the question that that liberty and political equality could not be preserved without the general education of all. A new motive for education was thus created and gradually formulated in the United States, as well as in revolutionary France, and the nature of the school instruction of the youth of the State came in time to be colored through and through by this new political motive. The necessary schools, though, did not come at once. On the contrary, the struggle to establish these necessary schools it will be our purpose to trace in subsequent chapters, but before doing so we wish first to point out how the rise of a political theory for education led to the development of a theory as to the nature of the educational process which exercised a far-reaching influence on all subsequent evolution of schools and teaching.

QUESTIONS FOR DISCUSSION

1. What do the proposals of La Chalotais, Rolland, and Turgot indicate as to the degree of unification of France attained by the time they wrote?
2. What new subjects did Diderot add to the religious elementary school of his time?
3. Show how the decline in efficiency of the Jesuits was a stimulating force for the evolution of a system of public instruction in France.
4. Show the statesman-like character of the proposals made in the legislative assemblies of France for the organization of national education.
5. Assuming that there had been peace, and funds to carry out the law (1793) of the Convention for primary instruction, what other difficulties would have been met that would have been hard to surmount?
6. Compare the Lakanal school with an American elementary school of a half-century ago.
7. Show that many of the important educational reforms of Napoleon were foreshadowed in the National Convention.
8. Was Napoleon right in his attitude toward education and schools?
9. Explain the lack of success of the revolutionary theorists in the establishment of a state system of education.
10. Explain why the breakdown of the old religious intolerance came earlier in the American Colonies than in the Old World.
11. Show the great value of the Laws of 1642 and 1647 in holding New England true to the maintenance of schools during the period of decline.
12. What might have been the result in America had the New England Colonies established the school as a parish institution, as did the central Colonies?
13. Analyze the Massachusetts constitutional provision for education, and show what it provided for.
14. Show the similarity of the University of the State of New York to the proposals for governmental control in France.
15. Explain why the French revolutionary ideas as to education were realized so easily in the new United States, whereas France did not realize them until well into the nineteenth century.
16. Compare Jefferson's proposed law with the proposals of Talleyrand for France.
17. Just what type of educational institutions did Washington have in mind in the quotation from his Farewell Address? John Jay? John Adams?

SELECTED READINGS

In the accompanying *Book of Readings* the following selections are reproduced:

254. Dabney: The Far-Reaching Influence of Rousseau's Writings.
255. La Chalotais: Essay on National Education.
256. Condorcet: Outline of a Plan for Organizing Public Instruction in France.
257. *Report: Founding* of the Polytechnic School at Paris.

258. Barnard: Work of the National Convention in France.
  (*a*) Various legislative proposals.
  (*b*) The Law of 1795 organizing Primary Instruction.
259. American States: Early Constitutional Provisions relating to Education.
260. Ohio: Educational Provisions of First Constitution.
261. Indiana: Educational Provisions of First Constitution.
262. American States: Early School Legislation in.
263. Jefferson: Plan for Organizing Education in Virginia.

SUPPLEMENTARY REFERENCES

Barnard, Henry. *American Journal of Education*, vol. 22, pp. 651–64.
Compayré, G. *History of Pedagogy*, chapters 15, 16, 17.
Cubberley, E. P. *Public Education in the United States*, chapter 3.

CHAPTER XXI

A NEW THEORY AND SUBJECT-MATTER FOR THE ELEMENTARY SCHOOL

In chapters xvii and xviii we traced the development of educational theory up to the point where John Locke left it (p. 217) after outlining his social and disciplinary theory for the educational process, and in the chapter preceding this one we traced the evolution of a new state theory as to the purpose of education to replace the old religious theory. The new theory as to state control, and the erection of a citizenship purpose for education, made it both possible and desirable that the instruction in the school, and particularly in the vernacular school, should be recast, both in method and content, to bring the school into harmony with the new secular purpose. In consequence, an important reorganization of the vernacular school now took place, and to this transformation of the elementary school we next turn.

I. THE NEW THEORY STATED

Iconoclastic nature of the work of Rousseau. The inspirer of the new theory as to the purpose of education was none other than the French-Swiss iconoclast and political writer, Jean-Jacques Rousseau, whose work as a political theorist we have previously described. Happening to take up the educational problem as a phase of his activity against the political and social and ecclesiastical conditions of his age, drawing freely on Locke's *Thoughts* for ideas, and inspired by a feeling that so corrupt and debased was his age that if he rejected everything accepted by it and adopted the opposite he would reach the truth, Rousseau restated his political theories as to the control of man by society and his ideas as to a life according to "nature" in a book in which he described the education, from birth to manhood, of an imaginary boy, Émile, and his future wife, Sophie. In the first sentence of the book Rousseau sets forth his fundamental thesis:

> All is good as it comes from the hand of the Creator; all degenerates under the hands of man. He forces one country to produce the fruits of another, one tree to bear that of another. He confounds climates, elements, and seasons; he mutilates his dog, his horse, his slave; turns

everything topsy-turvy, disfigures everything. He will have nothing as nature made it, not even man himself; he must be trained like a managed horse, trimmed like a tree in a garden.

His book, published in 1762, in no sense outlined a workable system of education. Instead, in charming literary style, with much sophistry, many paradoxes, numerous irrelevant digressions upon topics having no relation to education, and in no systematic order, Rousseau presented his ideas as to the nature and purpose of education. Emphasizing the importance of the natural development of the child (**R. 264 a**), he contended that the three great teachers of man were nature, man, and experience, and that the second and third tended to destroy the value of the first (**R. 264 b**); that the child should be handled in a new way, and that the most important item in his training up to twelve years of age was to do nothing (**R. 264 c, d**) so that nature might develop his character properly (**R. 264 e**); and that from twelve to fifteen his education should be largely from things and nature, and not from books (**R. 264 f**). As the outcome of such an education Rousseau produced a boy who, from his point of view, would at eighteen still be natural (**R. 264 g**) and unspoiled by the social life about him, which, after all, he felt was soon to pass away (**R. 264 i**). The old religious instruction he would completely supersede (**R. 264 h**).

FIG. 69. THE ROUSSEAU MONUMENT AT GENEVA

So depraved was the age, and so wretched were the educational practices of his time, that, in spite of the malevolent impulse which was his driving force, what he wrote actually contained many excellent ideas, pointed the way to better practices, and became an inspiration for others who, unlike Rousseau, were deeply interested in problems of education and child welfare. One cannot study Rousseau's writings as a whole, see him in his eighteenth-century setting, know of his personal life, and not feel that the far-reaching reforms produced by his *Émile* are among the strangest facts in history.

The valuable elements in Rousseau's work. Amid his glittering generalities and striking paradoxes Rousseau did, however, set forth certain important ideas as to the proper education of children. Popularizing the best ideas of the Englishman, Locke (p. 217), Rousseau may be said to have given currency to certain conceptions as to the education of children which, in the hands of others, brought about great educational changes. Briefly stated, these were:

1. The replacement of authority by reason and investigation.
2. That education should be adapted to the gradually unfolding capacities of the child.
3. That each age in the life of a child has activities which are normal to that age, and that education should seek for and follow these.
4. That physical activity and health are of first importance.
5. That education, and especially elementary education, should take place through the senses, rather than through the memory.
6. That the emphasis placed on the memory in education is fundamentally wrong, dwarfing the judgment and reason of the child.
7. That catechetical and Jesuitical types of education should be abandoned.
8. That the study of theological subtleties is unsuited to child needs or child capacity.
9. That the natural interests, curiosity, and activities of children should be utilized in their education.
10. That the normal activities of children call for expression, and that the best means of utilizing these activities are conversation, writing, drawing, music, and play.
11. That education should no longer be exclusively literary and linguistic, but should be based on sense perception, expression, and reasoning.
12. That such education calls for instruction in the book of nature, with home geography and the investigation of elementary problems in science occupying a prominent place.
13. That the child be taught rather than the subject-matter; life here rather than hereafter; and the development of reason rather than the loading of the memory, were the proper objects of education.
14. That a many-sided education is necessary to reveal child possibilities; to correct the narrowing effect of specialized class education; and to prepare one for possible changes in fortune.

Coming, as it did, at a time when political and ecclesiastical despotisms were fast breaking down in France, when new forces were striving for expression throughout Europe, and when new theories as to the functions of government were being set forth in the American Colonies and in France, it gave the needed inspiration for the evolution of a new theory of non-religious, universal, and *democratic education* which would prepare citizens for intelligent participation in the functions of a democratic State, and for a reorganization of the subject-matter of education itself.

II. GERMAN ATTEMPTS TO WORK OUT A NEW THEORY

Influence of the *Émile* in German lands. The *Émile* was widely read, not only in France, but throughout the continent of Europe as well. In German lands its publication coincided with the rising tide of nationalism — the "Period of Enlightenment" — and the book was warmly welcomed by such (then young) men as Goethe, Schiller, Herder, Richter, Fichte, and Kant. It presented a new ideal of education and a new ideal for humanity, and its ideas harmonized well with those of the newly created aristocracy of worth which the young German enthusiasts were busily engaged in proclaiming for their native land.

Perhaps the most important practical influence exerted by the *Émile* in German lands came in the work of Johann Bernard Basedow and his followers. Deeply imbued with the new scientific spirit, in thorough revolt against the dominance of the Church in human lives, and incited to new efforts by his reading of the *Émile*, Basedow thought out a plan for a reform school which should put many of Rousseau's ideas into practice. In 1768 he issued his *Address to Philanthropists and Men of Property on Schools and Studies and their Influence on the Public Weal*, in which he appealed for funds to enable him to open a school to try out his ideas, and to enable him to prepare a new type of textbooks for the use of schools. He proposed in this appeal to organize a school which should be non-sectarian, and also advocated the creation of a National Council of Education to have charge of all public instruction. These were essentially the ideas of the French political reformers of the time. The appeal was widely scattered, awakened much enthusiasm, and subscriptions to assist him poured in from many sources.

FIG. 70. BASEDOW (1723–90)

In 1774 Basedow published two works of more than ordinary importance. The first, a *Book of Method for Fathers and Mothers of Families and of Nations*, was a book for adults, and outlined a plan of education for both boys and girls. The keynotes were "following nature," "impartial religious instruction," children to be dealt with as children, learning through the senses, language instruction by a natural method, and much study of natural objects. The ideas were a combination of those of Bacon, Comenius, and Rousseau. The second book, in four volumes, and containing one hundred copper-plate illustrations, was the famous *Elementary Work* (*Elementarwerk mit Kupfern*) (R. 266), the first illustrated school textbook since the *Orbis Pictus* (1654) of Comenius. This work of Basedow's became, in German lands, the *Orbis Pictus* of the eighteenth century. By means of its "natural methods" (R. 265) children were to be taught to read, both the vernacular and Latin, more easily and in less time than had been done before, and in addition were to be given a knowledge of morals, commerce, scientific subjects, and social usages by "an incomparable method," founded on experience in teaching children. The book enjoyed a wide circulation among the middle and upper classes in German lands.

Basedow's *Philanthropinum*. In 1774 Prince Leopold, of Dessau, a town in the duchy of Anhalt, in northern Germany, gave Basedow the use of two buildings and a garden, and twelve thousand thalers in money, with which to establish his long-heralded *Philanthropinum*, which was to be an educational institution of a new type. Great expectations were aroused, and a widespread interest in the new school awakened. Education according to nature, with a reformed, time-saving, natural method for the teaching of languages, were to be its central ideas. Children were to be treated as children, and not as adults. Powdered hair, gilded coats, swords, rouge, and hoops were to be discarded for short hair, clean faces, sailor jackets, and caps, while the natural plays of children and directed physical training were to be made a feature of the instruction. The languages were to be taught by conversational methods. Each child was to be taught a handicraft — turning, planing, and carpentering were provided — for both social and educational reasons. Instruction in real things — science, nature — was to take the place of instruction in words, and the vernacular was to be the language of instruction. The institution was to have the atmosphere of religion, but was not to be Catholic, Lutheran, Reformed, or Jewish, and was to be free from "theologizing distinctions." Latin, German, French, mathematics, a knowledge of nature (geography, physics, natural history), music, dancing, drawing, and physical training were the principal subjects of instruction. The children were divided into four classes, and the instruction for each, with the textbooks to be used, was outlined (R. 265).

As a promising experiment the school awakened widespread interest, and Basedow was supported by such thinkers of the time as Goethe and Kant.

Basedow's influence, and followers. Basedow, though, was an impractical theorist, boastful and quarrelsome, vulgar and coarse, given to drunkenness and intemperate speech, and fond of making claims for his work which the results did not justify. In a few years he had been displaced as director, and in 1793 the *Philanthropinum* closed its doors. The school, nevertheless, was a very important educational experiment, and Basedow's work for a time exerted a profound influence on German pedagogical thought. He may be said to have raised instruction in the *Realien* in German lands to a place of distinct importance, and to have given a turn to such instruction which it has ever since retained. The methods of instruction, too, worked out in arithmetic, geography, geometry, natural history, physics, and history were in many ways as revolutionary as those evolved by Pestalozzi later on in Switzerland. In his emphasis on scientific subject-matter Basedow surpassed Pestalozzi, but Pestalozzi possessed a clearer, intuitive insight into the nature and purpose of the educational process. The work of the two men furnishes an interesting basis for comparison (R. 271), and the work of each gave added importance to that of the other.

From Dessau an interest in pedagogical ideas and experiments spread over Europe, and particularly over German lands. Other institutions, modeled after the *Philanthropinum*, were founded in many places, and some of Basedow's followers did as important work along certain lines as did Basedow himself. His followers were numerous, and of all degrees of worth. They urged acceptance of the new ideas of Rousseau as worked out and promulgated by Basedow; vigorously attacked the old schools, making converts here and there; and in a way helped to prepare northern German lands for the incoming, later, of the better-organized ideas of the German-Swiss reformer Pestalozzi, to whose work we next turn.

III. THE WORK AND INFLUENCE OF PESTALOZZI

The inspiration of Pestalozzi. Among those most deeply influenced by Rousseau's *Émile* was a young German-Swiss by the name of Johann Heinrich Pestalozzi, who was born (1746) and brought up in the ancient city of Zurich. Inspired by Rousseau's writings he spent the early part of his life in trying to render service to the poor, and the latter part in working out for himself a theory and a method of instruction based on the natural development of the child. To Pestalozzi, more than to any one else, we owe the foundations of the modern secular vernacular elementary school, and in consequence his work is of commanding importance in the history of the development of educational practice.

Trying to educate his own child according to Rousseau's plan, he not only discovered its impracticability but also that the only way to improve on it was to study the children themselves. Accordingly he opened a school and home on his farm at Neuhof, in 1774. Here he took in fifty abandoned children, to whom he taught reading, writing, and arithmetic, gave them moral discourses, and trained them in gardening, farming, and cheese-making. It was an attempt to regenerate beggars by means of education, which Pestalozzi firmly believed could be done. At the end of two years he had spent all the money he and his wife possessed, and the school closed in failure — a blessing in disguise — though with Pestalozzi's faith in the power of education unshaken. Of this experiment he wrote: "For years I have lived in the midst of fifty little beggars, sharing in my poverty my bread with them, living like a beggar myself in order to teach beggars to live like men."

Turning next to writing, while continuing to farm, Pestalozzi now tried to express his faith in education in printed form. His *Leonard and Gertrude* (1781) was a wonderfully beautiful story of Swiss peasant life, and of the genius and sympathy and love of a woman amid degrading surroundings. From a wretched place the village of Bonnal, under Pestalozzi's pen, was transformed by the power of education. The book was a great success from the first, and for it Pestalozzi was made a "citizen" of the French Republic. He continued to farm and to think, though nearly starving, until 1798, when the opportunity for which he was really fitted came.

Pestalozzi's educational experiments. In 1798 "The Helvetic

Republic" was proclaimed, an event which divided Pestalozzi's life into two parts. Up to this time he had been interested wholly in the philanthropic aspect of education, believing that the poor could be regenerated through education and labor. From this time on he interested himself in the teaching aspect of the problem, in the working-out and formulation of a teaching method based on the natural development of the child, and in training others to teach. Much to the disgust of the authorities of the new Swiss Government, citizen Pestalozzi applied for service as a schoolteacher. The opportunity to render such service soon came.

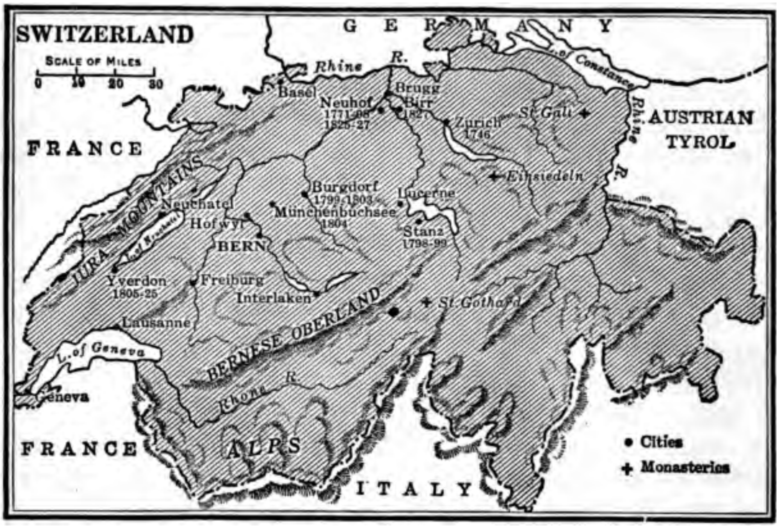

FIG. 71. THE SCENE OF PESTALOZZI'S LABORS

That autumn the French troops invaded Switzerland, and, in putting down the stubborn resistance of the three German cantons, shot down a large number of the people. Orphans to the number of 169 were left in the little town of Stanz, and citizen Pestalozzi was given charge of them. For six months he was father, mother, teacher, and nurse. Then, worn out himself, the orphanage was changed into a hospital. A little later he became a schoolmaster in Burgdorf; was dismissed; became a teacher in another school; and finally, in 1800, opened a school himself in an *old castle* there. He now drew about him other teachers interested in improving instruction, and in consequence could specialize the work. He provided separate teachers for drawing and singing, geography and history, language and arithmetic, and gymnastics. The year following the school was enlarged into a teachers' training-school, the government extending him aid in return for giving Swiss teachers one month of training as teachers in his school. In 1803, the castle being needed by the government, Pestalozzi moved first to Munchenbuchsee, near Hofwyl, opening his Institute temporarily in an old convent there. For a few months, in 1804, he was associated with Emanuel von Fellenberg, at Hofwyl (p. 303), but in October, 1804, he moved to Yverdon, where he reëstablished the Institute, and where the next twenty years of his life were spent and his greatest success achieved.

The contribution of Pestalozzi. The great contribution of Pestalozzi lay in that, following the lead of Rousseau, he rejected the religious aim and the teaching of mere words and facts, which had characterized all elementary education up to near the close of the eighteenth century, and tried instead to reduce the educational process to a well-organized routine, based on the natural and orderly development of the instincts, capacities, and powers of the growing child. Taking Rousseau's idea of a return to nature, he tried to apply it to the education of children. This led to his rejection of what he called the "empty chattering of mere words" and "outward show" in the instruction in reading and the catechism, and the introduction in their place of real studies, based on observation, experimentation, and reasoning. "Sense impression" became his watchword. As he expressed it, he "tried to organize and psychologize the educational process" by harmonizing it with the natural development of the child (**R. 267**). To this end he carefully studied children, and developed his methods experimentally as a result of his observation.

The development of man he believed to be organic, and to proceed according to law. It was the work of the teacher to discover these laws of development and to assist nature in securing "a natural, symmetrical, and harmonious development" of all the "faculties" of the child. Real education must develop the child as a whole — mentally, physically, morally — and called for the training of the head and the hand and the heart. The only proper means for developing the powers of the child was use, and hence education must guide and stimulate self-activity, be based on *intuition and exercise,* and the sense impressions must be organized and directed. Education, too, if it is to follow the organic development of the child, must observe the proper progress of child development and be graded, so that each step of the process shall grow out of the preceding and grow into the following stage. To accomplish these ends the training must be all-round and harmonious; much liberty must be allowed the child in learning; education must proceed largely by doing instead of by words, the method of learning must be largely analytical; real objects and ideas must precede symbols and words; and, finally, the organization and correlation of what is learned must be looked after by the teacher.

Still more, Pestalozzi possessed a deep and abiding faith, new at the time, in the power of education as a means of regenerating society. He had begun his work by trying to "teach beggars to live like men," and his belief in the potency of education in working this transformation, so touchingly expressed in his *Leonard and Gertrude*, never left him. He believed that each human being could be raised through the influence of education to the level of an intellectually free and morally independent life, and that every human being was entitled to the right to attain such freedom and independence. The way to this lay through the full use of his developing powers, under the guidance of a teacher, and not through a process of repeating words and learning by heart. Not only the intellectual qualities of perception, judgment, and reasoning need exercise, but the moral powers as well. To provide such exercise and direction was the work of the school.

The consequences of these ideas. The educational consequences of these new ideas were very large. They in time gave aim and purpose to the elementary school of the nineteenth century, transforming it from an instrument of the Church for church ends, to an instrument of society to be used for its own regeneration and the advancement of the welfare of all. The introduction of the study of natural objects in place of words, and much talking about what was seen and studied instead of parrot-like reproductions of the words of a book, revolutionized both the methods and the subject-matter of instruction in the developing elementary school. Observation and investigation tended to supersede mere memorizing; class discussion and thinking to supersede the reciting of the words of the book; thinking about what was being done to supersede routine learning; and class instruction to supersede the wasteful individual teaching which had

PLATE 4. PESTALOZZI MONUMENT AT YVERDON
A picture of this monument occupies a prominent place in every schoolroom in Switzerland.

for so long characterized all school work. It meant the reorganization of the work of the vernacular school on a modern basis, with class organization and group instruction, and a modern-world purpose (**R. 269**).

The work of Pestalozzi also meant the introduction of new subject-matter for instruction, the organization of new teaching subjects for the elementary school, and the redirection of the elementary education of children. Observation led to the development of elementary-science study, and the study of home geography; talking about what was observed led to the study of language usage, as distinct from the older study of grammar; and counting and measuring led to the study of number, and hence to a new type of primary arithmetic. The reading of the school also changed both in character and purpose. In other words, in place of an elementary education based on reading, a little writing and spelling, and the catechism, all of a memoriter type and with religious ends in view, a new primary school, essentially secular in character, was created by the work of Pestalozzi. This new school was based on the study of real objects, learning through sense impressions, the individual expression of ideas, child activity, and the development of the child's powers in an orderly way. In fact, "the development of the faculties" of the child became a by-word with Pestalozzi and his followers.

The spread and influence of Pestalozzi's work. So famous did the work of Pestalozzi become that his schools at Burgdorf and Yverdon came to be "show places," even in a land filled with natural wonders. Observers and students came from America (**R. 268**) and from all over Europe to see and to teach in his school, and draw inspiration from seeing his work (**R. 270**) and talking with him. In particular the educators of Prussia were attracted by his work, and, earlier than other nations, saw the far-reaching significance of his discoveries. Herbart visited his school as early as 1799, when but a young man of twenty-three, and wrote a very sympathetic description of his new methods. Froebel spent the years 1808 to 1810 as a teacher at Yverdon, when he was a young man of twenty-six to eight. "It soon became evident to me," wrote Froebel, "that 'Pestalozzi' was to be the watchword of my life." The philosopher Fichte, whose Addresses (1807–08) on the condition of the German people (page 315), after their humiliating defeat by Napoleon, did much to reveal to Prussia the *possibilities of national* regeneration by means of education, had taught in Zurich, knew Pestalozzi, and afterward exploited his work and his ideas in Berlin. As early as 1803 an envoy, sent by the Prussian King, reported favorably on Pestalozzi's work, and in 1804 Pestalozzian methods were authorized for the primary schools of Prussia. In 1808 seventeen teachers were sent to Switzerland, at the expense of the Prussian Government, to spend three years in studying Pestalozzi's ideas and methods. On their return, these and others spread Pestalozzian ideas throughout Prussia. A pastor and teacher from Würtemberg, Karl August Zeller (1774–1847), came to Burgdorf in 1803 to study. In 1806 he opened a training-school for teachers in Zurich, and there worked out a plan of studies based on the work of Pestalozzi. This was printed and attracted much attention. In 1808 the King of Würtemberg listened to five lectures on Pestalozzian methods by Zeller, and invited him to a position as school inspector in his State. Before he had done but a few months' work he was called to Prussia, to organize a normal school and begin the introduction of Pestalozzian ideas there. From Prussia the ideas and methods of Pestalozzi gradually spread to the other German States.

Many Swiss teachers were trained by Pestalozzi, and these also helped to extend his work and ideas over Switzerland. Particularly in German Switzerland did his ideas take root and reorganize education. As a result modern systems of education made an early start in these cantons. One of Pestalozzi's earliest and most faithful teachers, Hermann Krüsi, became principal of the Swiss normal school at Gais, and trained teachers there in Pestalozzian methods. Zeller's pupils, too, did much to spread his influence among the Swiss. Pestalozzi's ideas were also carried to England, but in no such satisfactory manner as to the German States. Where German lands received both the method and the spirit, the English obtained largely the form. Later Pestalozzian ideas came to the United States, at first largely through English sources, and, after about 1860, resulted in a thoroughgoing reorganization of American elementary education.

The manual-labor school of Fellenberg. Of the Swiss associates and followers of Pestalozzi one of the most influential was Phillip Emanuel von Fellenberg (1771–1844). Having become convinced that correct early education was the only means whereby the State might be elevated and the lot of man made better, *resolved* (*1805*) to devote his life and his fortune to the working out of his ideas. For a short time associated with Pestalozzi, he soon withdrew and established, on his own estate, an Institution which later (1829) came to comprise the following:

1. A farm of about six hundred acres.
2. Workshops for manufacturing clothing and tools.
3. A printing and lithographing establishment.
4. A literary institution for the education of the well-to-do.
5. A lower or *real* school, which trained for handicrafts and middle-class occupations.
6. An agricultural school for the education of the poor as farm laborers, and as teachers for the rural schools.

Fellenberg's work was a continuation of the social-regeneration conception of education held by Pestalozzi, and contained the germ-idea of all our agricultural and industrial education. His plan was widely copied in Switzerland, Germany, England, and the United States. It was well suited to the United States because of the very democratic conditions then prevailing among an agricultural people possessed of but little wealth. The plan of combining farming and schooling made for a time a strong appeal to Americans, and such schools were founded in many parts of the country. The idea at first was to unite training in agriculture with schooling, but it was soon extended to the rapidly rising mechanical pursuits as well. The plan, however, was rather short-lived in the United States, due to the rise of manufacturing and the opening of rich and cheap farms to the westward, and lasted with us scarcely two decades. More than one hundred Reports (**R. 272**) were published, in Europe and America, on this very successful experiment in a combined intellectual and manual-labor type of education.

FIG. 72. FELLENBERG (1771–1844)

IV. REDIRECTION OF THE ELEMENTARY SCHOOL

Significance of this work. Though some form of parish school for the elements of religious instruction had existed in many places during the later Middle Ages, and foundations providing for *some type of elementary* instruction had appeared here and there in almost all lands, the elementary vernacular school, as we have previously pointed out, was nevertheless clearly the outcome of the Protestant movement in the sixteenth century, and in its origin was essentially a child of the Church. A child of the Church, too, for more than two centuries the elementary vernacular school remained. During these two centuries the elementary school made slow but rather unsatisfactory progress, due largely to there being no other motive for its maintenance or expansion than the original religious purpose. Only in the New England Colonies in North America, in some of the provinces of the Netherlands, and in a few of the German States had any real progress been made in evolving any different type of school out of this early religious creation, and even in these places the change was in form of control rather than in subject-matter or purpose. The school remained religious in purpose, even though its control was beginning to pass from the Church to the State.

Now, within half a century, beginning with the work of Rousseau (1762), and by means of the labors of the political philosophers of France, the Revolutionary leaders in the American Colonies, the legislative Assemblies and Conventions in France, and the experimental work of Basedow and his followers in German lands and of Pestalozzi and his disciples in Switzerland, the whole purpose and nature of the elementary vernacular school was changed. The American and French political revolutions and the more peaceful changes in England had ushered in new conceptions as to the nature and purpose and duties of government. As a consequence of these new ideas, education had come to be regarded in a new light, and to assume a new importance in the eyes of statesmen. In place of schools to serve religious and sectarian ends, and maintained as an adjunct of the parishes or of a State Church, the elementary vernacular school now came to be conceived of as an instrument of the State, the chief purpose of which was to serve state ends. Some time would, of course, be required to develop the state support necessary to effect the complete transformation in control, and the forces of reaction would naturally delay the process as much as possible, but the theory of state purpose had at last been so effectively proclaimed, and the forces of a modern world were pushing the idea so steadily forward, that it was only a question of time until the change would be effected.

***A new impetus* for change in control.** Basedow and Pestalozzi, too, had given the movement for a transfer of control a new impetus by working out new methods in instruction and in organizing new subject-matter for the school, and methods and subject-matter which harmonized with the spirit and principles of the new democracy that had been proclaimed. Pestalozzi in particular had sought, guided by a clearer insight into the educational problem than Basedow possessed (R. 271), to create a school in which children might, under the wise guidance of the teacher, develop and strengthen their own "faculties" and thus evolve into reasoning, self-directing human beings, fitted for usefulness and service in a modern world. To make intelligent and reasoning individuals of all citizens, to develop moral and civic character, to train for life in organized society, and to serve as an instrument by means of which an ignorant, drunken, immoral, and shiftless working-class and peasantry might be elevated into men and women of character, intelligence, and directive power, was in Pestalozzi's conception the underlying meaning of the school. After Pestalozzi, the earlier conception as to the religious purpose of the elementary vernacular schools, by means of which children were to be trained almost exclusively "in the principles of our holy religion" and to become "loyal church members," and to "fit them for that station in life in which it hath pleased their Heavenly Father to place them," was doomed. In its stead there was certain to arise a newer conception of the school as an instrument of that form of organized society known as the State, and maintained by the State to train its future citizens for intelligent participation in the duties and obligations of citizenship, and for social, moral, and economic efficiency.

The way now becoming clear. After two hundred and fifty years of confusion and political failure, the way was now at last becoming clear for the creation of national instead of church systems of elementary education, and for the firm establishment of the elementary vernacular school as an important obligation to its future citizens of every progressive modern State and the common birthright of all. This became distinctively the work of the nineteenth century. It also became the work of the nineteenth century to gather up the old secondary-school and university foundations, accumulated through the ages, and remould them to meet modern needs, fuse them into the national school systems created, and connect them in some manner with the people's *schools. To see how this* was done we next turn to the beginnings of the organization of national school systems in the German States, France, England, and the United States. These may be taken as types. As Prussia was the first modern State to grasp the significance of national education, and to organize state schools, we shall begin our study by first tracing the steps by which this transformation was effected there.

QUESTIONS FOR DISCUSSION

1. Compare the statement of the valuable elements in the theories of Rousseau (p. 293) with the main ideas of Basedow (p. 295); Ratke (p. 220); Comenius (p. 221).
2. Do we accept all the fourteen points of Rousseau's theory to-day?
3. Might a Rousseau have done work of similar importance in Russia, early in the twentieth century? Why?
4. Explain the educational significance of "self-activity," "sense impressions," and "harmonious development."
5. What were the strong points in the experimental work of Basedow?
6. Explain the great enthusiasm which his rather visionary statements and plans awakened.
7. Show the importance of such work as that of Basedow in preparing the way for better-organized reform work.
8. How far was Pestalozzi right as to the power of education to give men intellectual and moral freedom?
9. What do you understand Pestalozzi to have meant by "the development of the faculties"?
10. State the importance of the work of Pestalozzi from the point of view of showing the world how to deal with orphans and defectives.
11. Show how the germs of agricultural and technical education lay in the work of Fellenberg.
12. Explain the greater popularity of the *Émile* in German lands.
13. State the change in subject-matter and aims from the vernacular church school to the school as thought out by Pestalozzi.
14. Show that it was a fortunate conjunction that brought the work of Pestalozzi alongside of that of the political reformers of France.
15. What differences might there have been had Comenius lived and done his work in the time of Pestalozzi?

SELECTED READINGS

In the accompanying *Book of Readings* the following selections, illustrative of the contents of this chapter, are reproduced:

264. Rousseau: Illustrative Selections from the *Émile.*
265. Basedow: Instruction in the *Philanthropinum.*
266. Basedow: A Page from the *Elementarwerk.*
267. Pestalozzi: Explanation of his Work.
268. Griscom: A Visit to Pestalozzi at Yverdon.
269. Woodbridge: An Estimate of Pestalozzi's Work.
270. Dr. Mayo: On Pestalozzi.
271. Woodbridge: Work of Pestalozzi and Basedow compared.
272. Griscom: Hofwyl as seen by an American.

SUPPLEMENTARY REFERENCES

*Anderson, L. F. "The Manual-Labor-School Movement"; in *Educational Review*, vol. 46, pp. 369–88. (November, 1913.)
Barnard, Henry. *Pestalozzi and his Educational System.*
*Compayré, G. *Jean-Jacques Rousseau.*
*Compayré, G. *Pestalozzi and Elementary Education.*
*Guimps, Roger de. *Pestalozzi: his Aim and Work.*
*Krüsi, Hermann, Jr. *Life and Work of Pestalozzi.*
*Parker, S. C. *History of Modern Education*, chaps. 8, 9, 13–16.
*Pestalozzi, J. H. *Leonard and Gertrude.*
Pestalozzi, J. H. *How Gertrude teaches her Children.*
Pinloche, A. *Pestalozzi and the Foundations of the Modern Elementary School.*

CHAPTER XXII

NATIONAL ORGANIZATION IN PRUSSIA

I. THE BEGINNINGS OF NATIONAL ORGANIZATION

Early German progress in school organization. The first modern nation to take over the school from the Church, and to make of it an instrument for promoting the interests of the State was Prussia, and the example of Prussia was soon followed by the other German States. The reasons for this early action by the German States will be clear if we remember the marked progress made in establishing state control of the churches (p. 169) which followed the Protestant Revolts in German lands. Figure 36, page 169, reëxamined now, will make the reason for the earlier evolution of state education in Germany plain. Würtemberg, as early as 1559, had organized the first German state-church school system, and had made attendance at the religious instruction compulsory on the parents of all children. The example of Würtemberg was followed by Brunswick (1569), Saxony (1580), Weimar (1619), and Gotha (1642). In Weimar and Gotha the compulsory-attendance idea had even been adopted for elementary-school instruction to all children up to the age of twelve.

By the middle of the seventeenth century most of the German States, even including Catholic Bavaria, had followed the example of Würtemberg, and had created a state-church school system which involved at least elementary and secondary schools and the beginnings of compulsory school attendance. Notwithstanding the ravages of the Thirty Years' War (1618–48), the state-church schools of German lands contained, more definitely than had been worked out elsewhere, the germs of a separate state school organization. Only in the American Colonies (p. 195) had an equal development in state-church organization and control been made. As state-church schools, with the religious purpose dominant, the German schools remained until near the middle of the eighteenth century. Then a new movement for state control began, and within fifty years thereafter they had been transformed into institutions of the State, with the state purpose their most essential characteristic. How this transformation was effected in Prussia, the leader among the German States, and the forces which brought about the transformation, it will be the purpose of this chapter to relate.

The earliest school laws for Prussia. In 1713 there came to the kingship of Prussia an organizing genius in the person of Frederic William I (1713–40). Under his direction Prussia was given, for the first time, a centralized and uniform financial administration, and the beginnings of state school organization were made. Though he cared nothing and did nothing for the universities, the religious reform movement of Francke, as well as his educational undertakings, found in the new King a warm supporter. Largely in consequence of this the King became deeply interested in attempts to improve and advance the education of the masses of his people.

The first year of his reign he issued a Regulatory Code for the Reformed Evangelical and Latin schools of Prussia, and in 1717 he issued the so-called "Advisory Order," relating to the people's schools. In this latter parents were urged, under penalty of "vigorous punishment," to send their children to school to learn religion, reading, writing, to calculate, and "all that could serve to promote their happiness and welfare." The tuition fees of poor children he ordered paid out of the community poor-box (R. 273). The following year he directed the authorities of Lithuania to relieve the existing ignorance there, and sent commissioners to provide the villages with schoolmasters. From time to time he renewed his directions. To insure a better class of teachers for the towns and rural schools, he, in 1722, directed that no one be admitted to the office of sacristan-schoolmaster except tailors, weavers, smiths, wheelwrights, and carpenters, and in 1738 he further restricted the position of teacher in the town and rural schools to tailors.

In 1737 the King issued his celebrated *Principia Regulative*, which henceforth became the fundamental School Law for the province of East Prussia. This prescribed conditions for the building of schoolhouses, the support of the schoolmaster, tuition fees, and government aid. The following digest of the section of the *Principia* relating to these matters gives a good idea as to the nature of the school regulations the King sought to enforce:

1. The parishes forming school societies were obliged to build schoolhouses and to keep them in repair.
2. *The State* was *to* furnish the necessary timber and firewood.

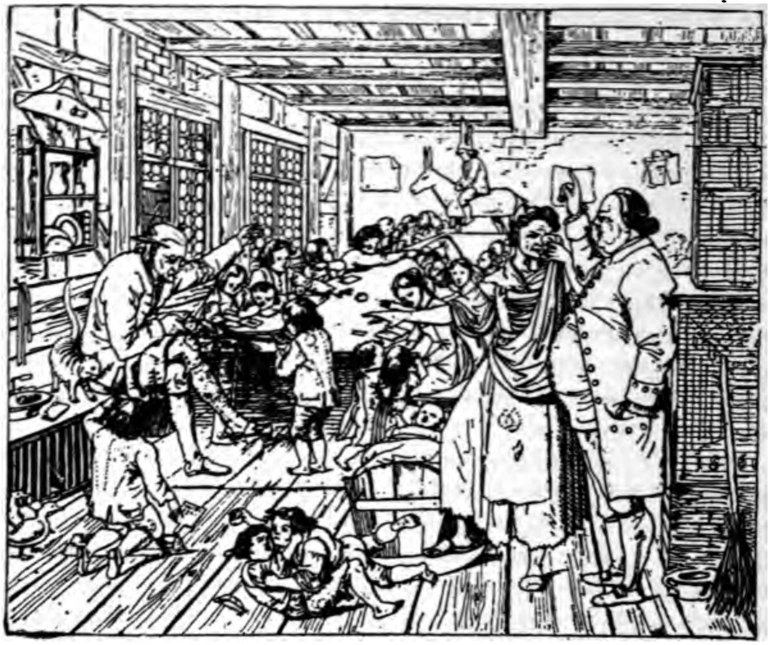

FIG. 73. THE SCHOOL OF A HANDWORKER

Conducted in his home. A gentleman visiting the school. After a drawing in the German School Museum in Berlin.

3. The expenses for doors, windows, and stoves to be obtained from collections.
4. Every church to pay four thalers a year toward the support of the schoolmaster.
5. Tuition fees for each child, from four to twelve years of age, to be four groschen per year.
6. Government to pay the fee when a peasant sends more than one child to school.
7. The peasants to furnish the teacher with certain provisions.
8. The teacher to have the right of free pasture for his small stock and some fees from every child confirmed.
9. Government to give the teacher one acre of land, which villagers were to till for him.

In 1738 the King further regulated the private schools and teachers in and about Berlin, in particular dealing with their qualifications and fees. The King showed, for the time, an interest heretofore almost unknown in and solicitude for the education of his people. That his decrees were in advance of the possibilities of the people in the matter of school support is not to be wondered at. Still, they rendered useful service in preparing the way for further organizing work by his successors, and in particular in accustoming the people to the ideas of state oversight and local school support. Under his successor and son, Frederick the Great, the preparatory work of the father bore important fruit.

The organizing work of Frederick the Great. In 1740 Frederick II, surnamed the Great, succeeded his father, and in turn guided the destinies of Prussia for forty-six years. In 1740, 1741, and again in 1743 he issued "regulations concerning the support of schools in the villages of Prussia," in which he directed that new schools should be established, teachers provided for them, and that "the existing school regulations and the arrangements made in pursuance thereto should be permanent, and that no change should be made under any pretext whatever."

In 1750 he effected a centralization of all the provincial church consistories, except that of Catholic Silesia, under the Berlin Consistory. This was a centralizing measure of large future importance, as it centralized the administration of the schools, as well as that of the churches, and transformed the Berlin Consistory into an important administrative agent of the central government. To this new centralized administrative organization the King issued instructions to pay special attention to schools, in order that they might be furnished with able schoolmasters and the young be well educated. One of the results of this centralization was the gradual evolution of the modern German *Gymnasien*, with uniform standards and improved instruction, out of the old and weakened Latin schools of various types within the kingdom.

From 1756 to 1763 Frederick was engaged in a struggle for existence, known as the Seven Years' War, but as soon as peace was at hand the King issued new regulations "concerning the maintenance of schools," and began employing competent schoolmasters for his royal estates. In April, 1763, he issued instructions to have a series of general school regulations prepared for all Prussia. These were drawn up by Julius Hecker, a former pupil and teacher in Francke's Institution, and now become a pastor in Berlin and counselor for the Berlin Consistory. After approval by the King, these were issued, September 23, 1763, under the title of *General Land-Schule Reglement* (general school regulations for the rural and village schools) of all Prussia (**R. 274**). These new regulations constituted the first general School Code for the *whole kingdom*, and mark the real foundation of the Prussian elementary-school system. Two years later (1765) a similar but stronger set of regulations or Code was drawn up and promulgated for the government of the Catholic elementary schools in the province of Silesia (**R. 275**). This was a new province which Frederick had wrested by force a few years previously (1748) from Maria Theresa of Austria, and the addition of a large number of Catholics to Prussia caused Frederick to issue specific regulations for schools among them.

These two School Codes did not so much bring already existing schools into a state system, but rather set up standards and obligations for an elementary-school system in part to be created in the future. The schools were still left under the supervision and direction of the Church, but the State now undertook to tell the Church what it must do. To enforce the obligation the State Inspectors of Prussia were directed to make an annual inspection (**R. 274**, § 26) of all schools, and to forward a report on their inspection to the Berlin Consistory.

These new Codes met with resistance everywhere. The money for the execution of such a comprehensive project was not as yet generally available; parents and churches objected to taxation and to the loss of their children from work; the wealthy landlords objected to the financial burden; the standards for teachers later on (1779) had to be lowered, and veterans from Frederick's wars installed; and the examinations of teachers had to be made easy to secure teachers at all for the schools. While there continued for some decades to be a vast difference between the actual conditions in the schools and the requirements of these Codes, and while the real establishment of a state school system awaited the first decade of the nineteenth century for its accomplishment, much valuable progress in organization nevertheless was made. In principle, at least, Frederick the Great, by the Codes of 1763 and 1765, effected for elementary education a transition from the church school of the Protestant Reformation, and for Catholic Silesia from the parish school of the Church, to the state school of the nineteenth century. It remained only for his successors to realize in practice what he had made substantial beginnings of in law. Nowhere else in Europe that early had such progress in educational organization been made.

Despite these many important educational efforts, though, the type and the work of teachers remained low throughout the whole of the eighteenth century. In the rural and village schools the teachers continued to be deficient in number and lacking in preparation. Often the pastors had first to give to invalids, cripples, shoemakers, tailors, watchmen, and herdsmen the rudimentary knowledge they in turn imparted to the children. In the towns of fair size the conditions were not much better than in the villages. The elementary school of the middle-sized towns generally had but one class, common for boys and girls, and the magistrates did little to improve the condition of the schools or the teachers. In the larger cities, and even in Berlin, the number of elementary schools was insufficient, the schools were crowded, and many children had no opportunity to attend schools. In Leipzig there was no public school until 1792, in which year the city free school was established. Even Sunday schools, supported by subscription, had been resorted to by Berlin, after 1798, to provide journeymen and apprentices with some of the rudiments of an education. The creation of a state school system out of the insufficient and inefficient religious schools proved a task of large dimensions, in Prussia as in other lands. Even as late as 1819 Dinter found discouraging conditions (**R. 279**) among the teachers of East Prussia.

Further late eighteenth-century progress. Frederick the Great died in 1786. In the reign of his successors his work bore fruit in a complete transfer of all schools from church to state control, and in the organization of the strongest system of state schools the world had ever known. The year following the death of Frederick the Great (1787), and largely as an outgrowth of the preceding centralizing work with reference to elementary education, the Superior School (*Oberschulcollegium*) Board was established to exercise a similar centralized control over the older secondary and higher schools of Prussia. Secondary and higher education were now severed from church control, in principle at least, as elementary education had been by the "Regulations" of 1763 and 1765.

In 1794 came the culmination of all the preceding work in the publication of the General Civil Code (*Allgemeine Landrecht*) for the State, in which, in the section relating to schools, the following important declaration was made:

> Schools and universities are state institutions, charged with the instruction of youth in useful information and scientific knowledge. Such institutions may be founded only with the knowledge and consent of the State. *All* public schools and educational institutions are

under the supervision of the State, and are at all times subject to its examination and inspection.

The secular authority and the clergy were still to share jointly in the control of the schools, but both according to rules laid down by the State. In all cases of conflict or dispute, the secular authority was to decide. This important document forms the *Magna Charta* for secular education in Prussia. During the decade which followed the promulgation of this declaration of state control but little additional progress of importance was accomplished.

II. A STATE SCHOOL SYSTEM AT LAST CREATED

The humiliation of Prussia. Having humiliated the Austrians and vanquished the Russians, Napoleon now goaded the Prussians into attacking him, and then utterly humiliated them in turn. At the battle of Jena (October 14, 1806) the Prussian army was utterly routed, and forced back almost to the Russian frontier. Officered by old generals and political favorites who were no longer efficient, and backed by a state service honeycombed with inefficiency and corruption, the Prussian army that had won such victories under Frederick the Great was all but annihilated by the new and efficient fighting machine created by the Corsican who now controlled the destinies of France. By the Treaty of Tilsit (July 7, 1807) Prussia lost all her lands west of the Elbe and nearly all her stealings from Poland — in all about one half her territory and population — and was almost stricken from the list of important powers in Europe. In all its history Prussia had experienced no such humiliation as this. In a few months the constructive work of a century had been undone.

The regeneration of Prussia. The new national German feeling, which had been slowly rising for half a century, now burst forth and soon worked a regeneration of the State. In the school of adversity the King and the people learned much, and the task of national reorganization was entrusted to a series of able ministers whom the King and his capable Queen, Louise, now called into service. Serfdom was abolished, local government was granted to the cities, legislative assemblies were organized, the army was reorganized and compulsory military service begun, and efficiency was introduced into the state service.

Though the abolition of serfdom, the reform of the civil service, and the beginnings of local and representative government were important gains, nothing was of secondary importance to the complete reorganization of education which now took place. The education of the people was turned to in earnest for the regeneration of the national spirit, and education was, in a decade, made the great constructive agent of the State. Said the King:

> Though we have lost many square miles of land, though the country has been robbed of its external power and splendor, yet we shall and will gain in intrinsic power and splendor, and therefore it is my earnest wish that the greatest attention be paid to public instruction. . . . The State must regain in mental force what it has lost in physical force.

Fichte appeals to the leaders. Still more did the philosopher Fichte (1762–1814), in a series of "Addresses to the German Nation," delivered in Berlin during the winter of 1807–08, appeal to the leaders to turn to education to rescue the State from the miseries which had overwhelmed it. Unable forcibly to resist, and with every phase of the government determined by a foreign conqueror, only education had been overlooked, he said, and to this the leaders should turn for national redemption (**R. 277**).

Fichte's Addresses stirred the thinkers among the German people as they had not been stirred since the days of the Reformation, and a national reorganization of education, with national ends in view, now took place. As Duke Ernest remade Gotha, after the ravages of the Thirty Years' War, by means of education (p. 168), so the leaders of Prussia now created a new national spirit by taking over the school from the Church and forging it into one of the greatest constructive instruments of the State. The result showed itself in the "Uprising of Prussia," in the winter of 1812–13; the "War of Liberation," of 1813–15; the utter defeat of Napoleon at the battle of Leipzig by Russia, Prussia, and Austria, in 1813; and again at the battle of Waterloo by England and Prussia, in 1815. Still more clearly was the result shown in the humiliating defeat of France, in 1870, when it was commonly remarked that the schoolmaster of Prussia had at last triumphed. The regeneration of Prussia in the early part of the nineteenth century, as well as its more recent humiliation, stand as eloquent testimonials to the tremendous influence of education on national destiny, when rightly and when wrongly directed.

The reorganization of elementary education. The first step in the process of educational reorganization was the abolition (1807) of the *Oberschulcollegium* Board, established (p. 313) in 1787 to *supervise secondary* and higher education, in order to get rid of clerical influence and control. The next step was the creation instead (1808) of a Department of Public Instruction, organized as a branch of the Interior Department of the State.

FIG. 74. DINTER (1760–1831)
Director of Teachers' Seminaries in Saxony; Superintendent of Education in East Prussia.

One of the first steps of the acting head of the new department was to send seventeen Prussian teachers (1808) to Switzerland to spend three years, at the expense of the Government, in studying Pestalozzi's ideas and methods, and they were particularly enjoined that they were not sent primarily to get the mechanical side of the method, but to

> warm yourselves at the sacred fire which burns in the heart of this man, so full of strength and love, whose work has remained so far below what he originally desired, below the essential ideas of his life, of which the method is only a feeble product.
>
> You will have reached perfection when you have clearly seen that education is an art, and the most sublime and holy of all, and in what connection it is with the great art of the education of nations.

In 1809 Carl August Zeller (1774–1847), a pupil of Pestalozzi, who had established two Pestalozzian training-colleges in Switzerland and had just begun to hold Pestalozzian institutes in Würtemberg (p. 302), was called to Prussia to organize a Teachers' Seminary (normal school) to train teachers in the Pestalozzian methods. The seventeen Prussian teachers, on their return from study with Pestalozzi, were also made directors of training institutions, or provincial superintendents of instruction. In this way Pestalozzian ideas were soon in use in the elementary schoolrooms of Prussia, and so effective was this work, and so readily did the Prussian teachers catch

FIG. 75. DIESTERWEG (1790–1866)
Director of Teachers' Seminaries at Maurs (1820–33) and Berlin (1833–49). "Der deutsche Pestalozzi"

the spirit of Pestalozzi's endeavors, that at the Berlin celebration of the centennial of his birth, in 1846, the German educator Diesterweg said:

> By these men and these means, men trained in the Institution at Yverdon under Pestalozzi, the study of his publications, and the applications of his methods in the model and normal schools of Prussia, after 1808, was the present Prussian, or rather Prussian-Pestalozzian school system established, for he is entitled to at least one half the fame of the German popular schools.

Similarly Gustavus Friedrich Dinter, who early distinguished himself as principal of a Teachers' Seminary in Saxony, was called to Prussia and made School Counselor (Superintendent) for the province of East Prussia. Wherever Prussia could find men, in other States, who knew Pestalozzian methods and possessed the new conception of education, they were called to Prussia and put to work, and the statement of Dinter was characteristic of the spirit which animated their work. He said:

> I promised God, that I would look upon every Prussian peasant child as a being who could complain of me before God, if I did not provide him with the best education, as a man and a Christian, which it was possible for me to provide.

Work of the Teachers' Seminaries. Napoleon had imposed heavy financial indemnities on Prussia, as well as loss of territory, and the material means with which to establish schools were scanty indeed. With a keen conception of the practical difficulties, the leaders saw that the key to the problem lay in the creation of a new type of teaching force, and to this end they began from the first to establish Teachers' Seminaries. Those who desired to enter these institutions were carefully selected, and out of them a steady stream of what Horace Mann described (**R. 278**) as a "beneficent order of men" were sent to the schools, "moulding the character of the people, and carrying them forward in a career of civilization more rapidly than any other people in the world are now advancing." Mann described, with marked approval, both the teacher and the training he received.

So successful were these institutions that within a decade, under the glow of the new national spirit animating the people, the elementary schools were largely transformed in spirit and purpose, and the position of the elementary-school teacher was *elevated from the rank* of a trade (**R. 279**) to that of a profession

(R. 278). By 1840, when the earlier fervor had died out and a reaction had clearly set in, there were in Prussia alone thirty-eight Teachers' Seminaries for elementary teachers, approximately thirty thousand elementary schools, and every sixth person in Prussia was in school. In the other German States, and in Holland, Sweden, and France, analogous but less extensive progress in providing normal schools and elementary schools had been made; but in Austria, which did not for long follow the Prussian example, the schools remained largely stationary for more than half a century to come.

Nationalizing the elementary instruction. That the system of elementary vernacular or people's schools (the term *Volksschule* now began to be applied) now created should be permeated by a strong nationalistic tone was, the times and circumstances considered, only natural. Though the Pestalozzian theories as to the development of the mental faculties, training through the senses, and the power of education to regenerate society were accepted, along with the new Pestalozzian subject-matter and methods in instruction (p. 302), all that could be rendered useful to the Prussian State in its extremity naturally was given special emphasis. Thus all that related to the home country — geography, history, and the German speech — was taught as much from the patriotic as from the pedagogical point of view. Music was given special emphasis as preparatory for participation in the patriotic singing-societies and festivals, which were organized at the time of the "Uprising of Prussia" (1813). Drawing and arithmetic were emphasized for their practical values. Physical exercises were given an emphasis before unknown, because of their hygienic and military values. Finally religion was given an importance beyond that of Pestalozzi's school, but with the emphasis now placed on moral earnestness, humility, self-sacrifice, and obedience to authority, rather than the earlier stress on the Catechism and church doctrine.

Clearly perceiving, decades ahead of other nations, the power of such training to nationalize a people and thus strengthen the State, the Prussian leaders, in the first two decades of the nineteenth century, laid the foundations of that training of the masses, and of teachers for the masses (R. 280), which, more than any other single item, paved the way for the development of a national German spirit, the unification of German lands into an Imperial German Empire, and that blind trust in and obedience to authority which has recently led to a second national humiliation.

The reorganization of secondary education. Alongside this elementary-school system for the masses of the people, the older secondary and higher school system for a directing class (p. 187) also was largely reorganized and redirected.

In 1810 the examination of all secondary-school teachers, according to a uniform state plan, was ordered. The examinations were to be conducted for the State by the university authorities; to be based on university training in the gymnasial subjects, with an opportunity to reveal special preparation in any subject or subjects; and no one in the future could even be nominated for a position as a gymnasial teacher who had not passed this examination. This meant the erection of the work of teaching in the secondary schools into a distinct profession; the elimination from the schools of the theological student who taught for a time as a stepping-stone to a church living; and the end of easy local examination and approval by town authorities or the patrons of a school. To insure still better preparation of candidates, Pedagogical Seminars were begun in the universities for imparting to future gymnasial teachers some pedagogical knowledge and insight while Philological Seminars also appeared, about the same time, to give additional training in understanding the spirit of instruction in the chief subjects of the gymnasial course — the classics. In 1826 a year of trial teaching before appointment (*Probejahr*) was added for all candidates, and in 1831 new and more stringent regulations for the examination of teachers were ordered. At least two generations ahead of other nations, Prussia thus developed a body of professional teachers for its secondary schools.

Founding of the University of Berlin. One result of the Treaty of Tilsit (p. 314) was that Prussia had lost all her universities, except three along the Baltic coast. Both Halle and Göttingen were lost, and the loss of Halle was a severe blow. In 1807 Fichte, who had been a professor at Jena, drew up a plan and submitted it to the King for the organization of a new university at Berlin. When Humboldt came to the head of the Department of Public Instruction the idea at once won his enthusiastic approval. In May, 1809, he reported favorably on the project to the King, and three months later a Cabinet Order was issued creating the new university, giving it an annual money grant, and assigning a royal palace to it for a home. The spirit with which the new institution was founded may be inferred from the following extract from a memorial, published by Humboldt, in 1810. In this he said:

> The State should not treat the universities as if they were higher classical schools or schools of special sciences. On the whole the State should not look to them at all for anything that directly concerns its own interests, but should rather cherish a conviction that, in fulfilling their real destination, they will not only serve its own purposes, but serve them on an infinitely higher plane, commanding a much wider field of operation, and affording room to set in motion much more efficient springs and forces than are at the disposal of the State itself.

This university was indeed a new creation, and to the selection of its first faculty Humboldt devoted almost all his energies during the period he remained in office. From the first, high attainment in some branch of knowledge, and the ability to advance that knowledge, was placed ahead of mere teaching skill. The most eminent scholars in all lines were invited to the new "chairs," and when it opened (1810) its first faculty represented the highest attainment of scholarship in German lands. From the first the instruction divested itself of almost all that characterized the school. The lecture replaced the classroom recitation, and the seminar, in which small groups of advanced students investigate a problem under the direction of a professor, was given a place of large importance in the institution. Original research and contributions to knowledge marked the work of both students and professors, the object being, not to train teachers for the schools, but to produce scholars capable of advancing knowledge by personal research.

The effect on the other German universities was marked. Some of the older institutions (Erfurt, Wittenberg, Cologne, Mainz) died out, while new foundations (Breslau, 1811; Bonn, 1818; Munich, 1826) after the new model, took their place. Those that continued were changed in character, and a new unity was established throughout the German university world. By 1850 exact scientific research, in both libraries and laboratories, and a sober search for truth, had become the watchword of all the German universities. In consequence they naturally assumed a world leadership, and were frequented by students from many lands. Especially has the United States been influenced in its university development by the large number of university teachers who received their specialized training in the German universities during the latter half of the nineteenth century.

A two-class state school system created. We thus see that Prussia by 1815, clearly by 1825, had taken over education from the Church and made of it an instrument of the State to serve State ends. For the masses there was the *Volksschule*, superseding the old religious vernacular school and clearly designed to create an intelligent but obedient and patriotic citizenship for the Fatherland, and in this school the great majority of the children of the State received their education for citizenship and for life. This was for both sexes, and was entirely a German school. Attendance upon this school was made compulsory, and beyond this some continuation education early began to be provided (**Rs. 274, § 6; 275 d; 276, § 15**). Within the past half-century continuation education, especially along vocational lines, as we shall point out in a subsequent chapter, has received in German lands a very remarkable development. To insure that this school should serve the State in the way desired, Teachers' Seminaries, for the training of *Volksschule* teachers, were from the first made a feature of the new state system.

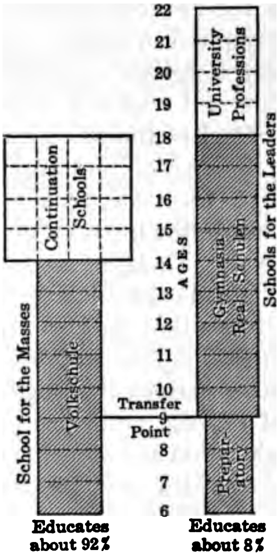

FIG. 76. THE PRUSSIAN STATE SCHOOL SYSTEM CREATED

Compare with Fig. 93 and note the difference between a European two-class school system and the American democratic educational ladder.

For those who were to form the official and directing class of society — a closely limited, almost entirely male, intellectual aristocracy — education in separate classical schools, with university or professional training superimposed, was provided, and this type of training offered a very thorough preparation for a small and a carefully selected class. Out of this class the leaders of Germany for a century have been drawn. For this classical school also the universities were early directed to prepare a well-educated body of teachers. The Prussian plan was followed in all its essentials in the other German States, so that the drawing given (Fig. 76) was true for Germany as a whole, as well as for Prussia, up at least to 1914.

New *nineteenth-century* tendencies manifested. In this early evolution of the Prussian state school systems we find two prominent nineteenth-century ideas expressing themselves. The first is the new conception of the State as not merely a government organized to secure national safety and protection from invasion, but rather an organization of the people to promote public welfare and realize a moral and political ideal. To this end state control of the whole range of education, to enable the State to promote intellectual and moral and social progress along lines useful to the State, became a necessity, and some form of this education, in the interests of the public welfare, must now be extended to all. Though France and the new American nation gave earlier political expression to this new conception of the State, it was in Prussia that the idea attained its earliest concrete and for long its most complete realization. Seeing further and more clearly than other nations the possibilities of education, the practical workers of Prussia, and after them the other German States, took over education as a function of the State for the propagation of the national ideas and the promotion of the national culture.

So well was this system and plan working that, had the Imperial Government not been so impatient of that slower but surer progress by peaceful means, and staked all on a gambler's throw, in another half-century the German nation might have held the world largely in fee. As it is, the results which the Germans attained by reason of definite aims and definite methods are both an encouragement and a warning to other nations.

QUESTIONS FOR DISCUSSION

1. Point out the extent of the educational reorganization which resulted from the reform work begun at Halle.
2. How do you explain the very early German interest in compulsory school attendance, when such was unknown elsewhere in Europe?
3. Compare the Prussian Regulations of 1737 with what was common at that time in practice in the parishes of the American Colonies.
4. Show the wisdom of the early Prussian kings in working at school reform through the Church. Could they well have worked otherwise? Why?
5. How do you explain such a slow development of a professional teaching body in Prussia, when all the state influences had for so long been favorable to educational development?
6. Show that the Oberschulcollegium Board marked the beginnings of a State Ministry for Education for Prussia.
7. Show that the spirit of the Prussian leaders, after 1806, was a further expansion of the German national feeling which arose in the Period of Enlightenment.
8. Show that the reorganization of elementary education, and the creation of the University of Berlin, were almost equally important events for the future of German lands.

9. Show that the work of Prussia, in using the schools for national ends, was: (*a*) in keeping with the work of the French Revolutionary leaders, and (*b*) only a further extension of the organizing work done by Frederick the Great.
10. Show how the universities of Germany early took the lead of the universities of the world, and the influence of this fact on national progress.
11. Enumerate the new nineteenth-century tendencies observable in the early educational organization in Prussia.
12. Explain the marked mid-nineteenth-century reaction to educational development which set in.
13. Explain the early and marked welcome accorded science-study in German lands.
14. Explain in what ways Prussia attained an educational leadership, ahead of other nations.

SELECTED READINGS

In the accompanying *Book of Readings* the following selections, illustrative of the contents of this chapter, are reproduced:

273. Barnard: The Organizing Work of Frederick William I.
274. Prussia: The School Code of 1763.
275. Prussia: The Silesian School Code of 1765.
276. Austria: The School Code of 1774.
277. Fichte: Addresses to the German Nation.
278. Mann: The Prussian Elementary Teacher and his Training.
279. Dinter: Prussian Schools and Teachers as he found them.
280. Cousin: Report on Education in Prussia.
281. Mann: The Military Aspect of Prussian Education.

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*Cassell, Henry. "Adolph Diesterweg"; in *Educational Review*, vol. 1, pp. 345-56. (April, 1891.)
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CHAPTER XXIII

NATIONAL ORGANIZATION IN FRANCE

Lines of development marked out by the Revolution. The Revolution proved very disastrous to the old forms of education in France. The old educational foundations, accumulated through the ages, were swept away, and the teaching congregations, which had provided the people with whatever education they had enjoyed, were driven from the soil. The ruin of educational and religious institutions in Russia under the recent rule of the Bolshevists is perhaps comparable to what happened in France. Many plans were proposed by the Revolutionary philosophers and enthusiasts, as we have seen (chapter xx), to replace what had once been and to provide better than had once been done for the educational needs of the masses of the people, but with results that were small in comparison with the expectations of the legislative assemblies which considered or approved them. Nevertheless, the directions of future progress in educational organization were clearly marked out before Napoleon came to power, and the work which he did was largely an extension, and a reduction to working order, of what had been proposed or established by the enthusiasts of the pre-revolutionary and revolutionary periods. At the time of the Revolution the State definitely took over the control of education from the Church, and the work of Napoleon and those who came after him was to organize public instruction into a practical state-controlled system.

In effecting this organization, the preceding discussions of education as a function of the State and the desirable forms of organization to follow all bore important fruit, and the forms finally adopted embodied not only the ideas contained in the legislation of the revolutionary assemblies, but also the peculiar administrative genius of France — that desire for uniformity in organization and administration — and hence stand in contrast to the state educational organizations worked out about the same time in German lands. The German States, as we have seen, had for long been working toward state control of education, but when this was finally attained they still permitted a large degree of local initiative and control. The French, on the contrary made the transition in a few years, and the system of state control which they established provided for uniformity, and for centralized supervision and inspection in the hands of the State.

In consequence, Prussia and the other German States early achieved a form of state educational organization which emphasized local interest and the spirit of the instruction, whereas France created an administrative organization which emphasized central control and, for the time, the form rather than the spirit of instruction. This was well pointed out by Victor Cousin (**R. 280**), in contrasting conditions in Prussia with those existing in France.

Napoleon begins the organization of education. In 1799 Napoleon became First Consul and master of France, and in 1804 France, by vote, changed from a Republic to an Empire, with Napoleon as first Emperor. Until his banishment to Saint Helena (1815) he was master of France. A man of large executive capacity and an organizing genius of great ability, whether he turned to army organization, governmental organization, the codification of the laws, or the organization of education, Napoleon's practical and constructive mind quickly reduced parts to their proper places in a well-regulated scheme. Shortly after he became Consul he took up, among other things, the matter of educational organization.

In 1802 Napoleon first turned his attention to a general organization of public instruction by directing Count de Fourcroy, a distinguished chemist who had been a teacher in the Polytechnic School, and whom he appointed Director of Public Instruction, to draw up, according to his ideas, an organizing law on the subject. This became the Law of 1802. It was divided into nine chapters.

1. Primary schools. The chapter on primary schools virtually reënacted the Law of 1795 (**R. 258 b**). Each commune was required to furnish a schoolhouse and a home for the teacher. The teacher was to be responsible to local authorities, while the supervision of the school was placed under the prefect of the Department. The instruction was to be limited to reading, writing, and arithmetic, and the legal authorities were enjoined "to watch that the teachers did not carry their instructions beyond these limits." The teacher was to be paid entirely from tuition fees, though one fifth of the pupils were to be provided with free schooling. *The State gave nothing* toward the support of the primary schools.

The interest of Napoleon was not in primary or general education, but rather in training pupils for scientific and technical efficiency, and youths of superior ability for the professions and for executive work in the kind of government he had imposed upon France. To this end secondary and special education were made particular functions of the State, while primary education was left to the communes to provide as they saw fit. They could provide schools and the parents could pay for the teacher, or not, as they might decide. There was no compulsion to enforce the requirement of a primary school, and no state aid to stimulate local effort to create one. In consequence not many state primary schools were established, and primary education remained, for another generation, in the hands of private teachers and the Church.

2. Secondary schools. Chapters III and IV of the Law of 1802 made full provision for two types of secondary schools — the Communal Colleges and the Lycées — to replace the Central Higher Schools established in 1795 (p. 284). The Law of 1802 now replaced them with two types of residential secondary schools, in which the youth of the country, under careful supervision and discipline, might prepare for entrance to the higher special schools. These fixed the lines of future French development in secondary schools.

The standard secondary school now became known as the *Lycée*. These institutions corresponded to the Colleges under the old régime, of which the College of Guyenne (**R. 136**) was a type. The instruction was to include the ancient languages, rhetoric, logic, ethics, belles-lettres, mathematics, and physical science, with some provision for additional instruction in modern languages and drawing. The funds for maintenance came from tuition fees, boarding and rooming income, and state scholarships, of which six thousand four hundred were provided.

Besides the Lycées, every school established by a municipality, or kept by an individual, which gave instruction in Latin, French, geography, history, and mathematics was designated as a secondary school, or Communal College. These institutions usually offered but a partial Lycée course, and were tuition schools, being patronized by many parents whose tastes forbade the sending of their children to the lower-class primary schools. For the supervision of all these institutions the Director General of Public Instruction appointed three Superintendents of Secondary Studies;

and for the work of the schools he outlined the courses of instruction in detail, laid down the rules of administration, prepared and selected the textbooks, and appointed the "professors."

Special or Higher Schools. The chapter of the Law of 1802 on Special Schools made provision for the creation of the following special "faculties" or schools for higher education for France:

3 medical schools, to replace the *Schools of Health* of 1794 (p. 283).
10 law schools; increased to 12 in 1804 (Date of *Code Napoléon*, p. 518).
4 schools of natural history, natural philosophy, and chemistry.
2 schools of mechanical and chemical arts.
1 mathematical school.
1 school of geography, history, and political economy.
A fourth school of art and design.
Professors of astronomy for the observatories.

In 1803 the School of Arts and Trades was added (**R. 282**), and in 1804, after Napoleon had signed the Concordat with the Pope, thus restoring the Catholic religion (abolished 1791), schools of theology were added to the above list.

We have here, clearly outlined, the main paths along which French state educational organization had been tending and was in future to follow. The State had definitely dispossessed the Church as the controlling agency in education, and had definitely taken over the school as an instrument for its own ends. Though primary education had been temporarily left to the communes, and was soon to be turned over in large part to be handled by the Church for a generation longer, the supervision was to remain with the State. The middle-class elements were well provided for in the new secondary schools, and these were now subject to complete supervision by the State. For higher education groups of Special Schools, or Teaching Faculties, replaced the older universities, which were not re-created until after the coming of the Third Republic (1871). The dominant characteristics of the state educational system thus created, aside from its emphasis on secondary and higher education, were its uniformity and centralized control. These characteristics were further stressed in the reorganization of 1808, and have remained prominent in French educational organization ever since.

Creation of the University of France. By 1806 Napoleon was ready for a further and more complete organization of the public instruction of the State, and to this end the following law was *now enacted (May 10, 1806)*:

> Sec. 1. There will be formed, under the name of Imperial University, a body exclusively commissioned with teaching and public education throughout the Empire.
>
> Sec. 2. The members of this corporation can contract civil, special, and temporary obligations.
>
> Sec. 3. The organization of this corps will be given in the form of a law to the legislative body in the session of 1810.

In 1808, without the formality of further legislation, Napoleon issued an Imperial Decree creating the University of France. This was not only Napoleon's most remarkable educational creation, but it was an administrative and governing organization for education so in harmony with French spirit and French governmental ideas that it has persisted ever since, though changed somewhat in form with time.

Unlike the University of Berlin (p. 319), created a year later, this was not a teaching university at all, but instead a governing, examining, and disbursing corporation, presided over by a Grand Master and a Council of twenty-six members, all appointed by the Emperor. This Council decided all matters of importance, and exercised supervision and control over education of all kinds, from the lowest to the highest, throughout France.

The Special Higher Schools were also continued, and to the list given (p. 284) Napoleon added (1808) a Superior Normal School (**R. 283**) to train graduates of the *Lycées* for teaching. This opened in 1810, with thirty-seven students and a two-year course of instruction, and in 1815 a third year of method and practice work was added. With some varying fortunes, this institution has continued to the present.

The new interest in primary education. The period from 1815 to 1830 in France is known as the Restoration. Louis XVIII was made King and ruled until his death in 1824, and his brother Charles X who followed until deposed by the Revolution of 1830. Though a representative of the old régime was recalled on the abdication of Napoleon, the great social gains of the Revolution were retained. There was no odious restoration of privilege and absolute monarchy. Frenchmen continued to be equal before the law; a form of constitutional government was provided; the right of petition was recognized; and the system of public instruction as Napoleon had organized it continued almost unchanged. For a decade at least there was less political reaction in France than in other continental States.

In matters of education, what had been provided was retained, and there seems (**R. 284**) to have been an increasing demand for additions and improvements, particularly in the matter of primary and middle-class schools, and a willingness on the part of the communes to provide such advantages. Some small progress had been made in meeting these demands, before 1830.

In 1816 a small treasury grant (50,000 francs) was made for school books, model schools, and deserving teachers in the primary schools, and in 1829 this sum was increased to 300,000 francs. In 1818 the "Brothers of the Christian Schools" were permitted to be certificated for teaching on merely presenting their Letter of Obedience from the head of their Order, and in 1824 the cantonal school committees were remodeled so as to give the bishops and clergy entire control of all Catholic primary schools. In 1817 there were thirty-six *Lycées*, receiving an annual state subsidy of 812,000 francs; thirty years later the fifty-four in existence were receiving 1,500,000 francs. From 1822 to 1829 the Higher Normal School was suppressed, and twelve elementary normal schools were created in its stead.

Early work under the Monarchy of 1830. In July, 1830, Charles X attempted to suppress constitutional liberty, and the people rose in revolt and deposed him, and gave the crown to a new King, Louis-Philippe. He ruled until deposed by the creation of the Second Republic, in 1848. The "Monarchy of 1830" was supported by the leading thinkers of the time, prominent among whom were Thiers and Guizot, and one of the first affairs of State to which they turned their attention was the extension downward of the system of public instruction. The first steps were an increase of the state grant for primary schools (1830) to a million francs a year; the overthrow of the control by the priests of the cantonal school committees (1830); the abolition (1831) of the exemption of the religious orders from the examinations for teaching certificates; and the creation (1830–31) of thirty new normal schools.

The next step was to send (1831) M. Victor Cousin — Director of the restored Higher Normal School of France — on a mission to the German States, and in particular to Prussia, to study and report on the system of elementary education, teacher training, and educational organization and administration which had done so much for its regeneration. So convincing was Cousin's Report *that, despite bitter* national antipathies, it carried conviction throughout France. "It demonstrated to the government and the people the immense superiority of all the German States, even the most insignificant duchy, over any and every Department of France, in all that concerned institutions of primary and secondary education." Cousin pronounced the school law of Prussia (R. 280) "the most comprehensive and perfect legislative measure regarding primary education" with which he was acquainted, and declared his conviction that "in the present state of things, a law concerning primary education is indispensable in France." The chief question, he continued, was "how to procure a good one in a country where there is a total absence of all precedents and experience in so grave a matter." Cousin then pointed out the bases, derived from Prussian experience and French historical development, on which a satisfactory law could be framed (R. 284 a-c); the desirability of local control and liberty in instruction (R. 284 f-g); and strongly recommended the organization of higher primary schools (a new creation; first recommended (1792) by Condorcet, p. 281) as well as primary schools (R. 284 e) to meet the educational needs of the middle classes of the population of France.

FIG. 77
VICTOR COUSIN
(1792–1867)

The Law of 1833. On the basis of Cousin's *Report* a bill, making the maintenance of primary schools obligatory on every commune; providing for higher primary schools in the towns and cities; additional normal schools to train teachers for these schools; a corps of primary-school inspectors, to represent the State; and normal training and state certification required to teach in any primary school, was prepared. In an address to the Chamber of Deputies, in introducing the bill (1832), M. Guizot, the newly appointed Minister for Public Instruction, set forth the history of primary instruction in France up to 1832 (R. 285 a); described the two grades of primary instruction to be created (R. 285 b); and, emphasizing Cousin's maxim that "the schoolmaster makes the school," dwelt on the necessity for normal training and state certification for all primary teachers (R. 285 c). In preparing the bill it was decided not to follow the revolutionary ideas of free instruction, by lay and state teachers, or to enforce compulsion to attend, and for these omissions M. Guizot, in his *Mémoires* (**R. 286**), gives some very interesting reasons.

The bill became a law the following year, and is known officially as the Law of 1833. This Law forms the foundations upon which the French system of national elementary education has been developed, as the Napoleonic Law of 1802 and the Decree of 1808 have formed the basis for secondary education and French state administrative organization. A primary school was to be established in every commune, which was to provide the building, pay a fixed minimum salary to the teacher, and where able maintain the school. The State reserved the right to fix the pay of the teacher, and even to approve his appointment. A tuition fee was to be paid for attendance, but those who could not pay were to be provided with free places. The primary schools were to give instruction in reading, writing, arithmetic, the weights and measures, the French language, and morals and religion. The higher primary schools were to build on these subjects, and to offer instruction in geometry and its applications, linear drawing, surveying, physical science, natural history, history, geography, and music, and were to emphasize instruction in "the history and geography of France, and in the elements of science, as they apply it every day in the office, the workshop, and the field." These latter were the *Bürgerschulen*, recommended by Cousin (**R. 284 e**) on the basis of his study of Prussian education.

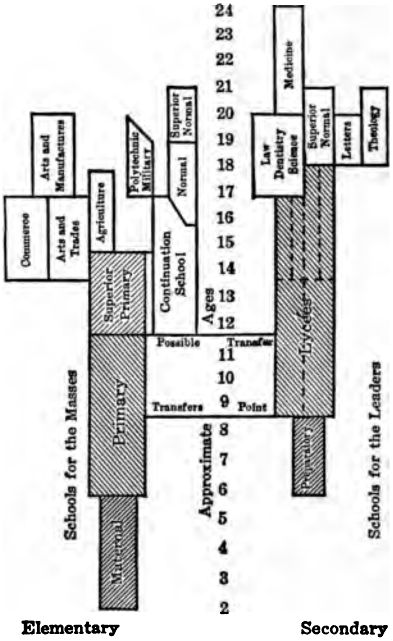

FIG. 78. OUTLINE OF THE MAIN FEATURES OF THE FRENCH STATE SCHOOL SYSTEM

In sending out a copy of the Law to the primary teachers of France, M. Guizot enclosed a personal letter to each, informing *him as to what the* government expected of him in the new work

(**R. 287**). During the four years that M. Guizot remained Minister of Public Instruction he rendered a remarkable service, well described by Matthew Arnold (**R. 288**), in awakening his countrymen to the new problem of popular education then before them.

The results under the Law of 1833 were large, and the subsequent legislation under the monarchy of 1830 was important. For the first time in French history an earnest effort was made to provide education suited to the needs of the great mass of the people, and the marked development of schools which ensued showed how eagerly they embraced the opportunities offered their children, though the schooling was neither compulsory nor gratuitous.

The period from 1848 to 1870 in France was a period of middle-class rule, and reaction in education as in government, and no real progress in advancing education was made. Instead religious schools were favored, some of the earlier leaders were sent into exile, and private schools were given full freedom to compete with the state schools.

Religious instruction prospered under the Second Empire, and the state primary schools lost in importance. The *Lycées* continued largely as classical institutions, though after 1865 the crowding of the rising sciences began to dispute the supremacy of classical studies. There were, however, many voices of discontent, particularly from exiled teachers (**R. 289**), and the way was rapidly being prepared for the creation of a stronger and better state school system as soon as political conditions were propitious.

Revolutionary ideals at last realized. With the creation of the Third Republic, in 1870, a change from the old conditions and old attitudes took place. Up to about 1879 the new government was in the control of those who were at heart sympathetic with the old conditions, but were forced to accept the new; from 1879 to 1890 was a transition period; and since 1890 the Republic has grown steadily in strength and regained its position among the great powers of the world. The first few years of the new Republic were devoted to paying the Prussian indemnity and clearing the soil of France of German armies, but, after about 1875, education became a great national interest among the leaders of France. France saw, somewhat as did Prussia after 1806, the *necessity* for creating a strong state system of primary, secondary, and higher schools to train the youth of the land in the principles of the Republic, strengthen the national spirit, advance the welfare of the State, and protect it from dangers both within and without.

Millions were put into the building of schoolhouses (1878–88); new normal schools were established; a normal school for women was created in each of the eighty-seven departments of France; the academic and superior councils of public instruction were reorganized to eliminate clerical influences (1881); religious instruction was replaced by moral and civic instruction (**R. 290**); and clerical "Letters of Obedience" were no longer accepted, and all teachers were required to be certificated by the State. The Law of 1881, eliminating instruction in religion from the elementary schools, was followed, in 1886, by a law providing for the gradual replacement of clerical by lay teachers. In 1904, the teaching congregations of France were suppressed. All elementary education now became public, free, compulsory, and secular, and teachers were required to be neutral in religious matters.

Since 1871, also, technical and scientific education has been emphasized; the primary and superior-primary schools have been made free (1881) and compulsory (1882); classes for adults have been begun generally; the state aid for schools has been very greatly increased; *lycées* and colleges for women have been created (1880); the *lycées* modernized in their instruction; and the reorganization and reëstablishment of a series of fifteen state universities of a modern type, begun in 1885, was completed in 1896. The reorganization and expansion of education in France since 1875 is a wonderful example of republican interest and energy, and is along entirely different lines from those followed, since the same date, in German lands.

After the lapse of nearly a century we now see the French Revolutionary ideas of gratuity, obligation, and secularization finally put into effect, and the state system of public instruction outlined by Condorcet (p. 281), in 1792, at last an accomplished fact.

QUESTIONS FOR DISCUSSION

1. Show how the Revolution marked out the lines of future educational evolution for France.
2. Explain why France and Italy evolved a school system so much more centralized than did other European nations.
3. Explain *Napoleon's* lack of interest in primary education, in view of *the needs of France* in his day.

4. Show that Napoleon was right, time and circumstances considered, in placing the state emphasis on the types of education he favored.
5. Explain why middle-class education should have received such special attention in Cousin's Report, and in the Law of 1833.
6. Was the course of instruction provided for the primary schools in 1833, times and needs considered, a liberal one, or otherwise? Why?
7. Compare the 1833 and the 1850 courses.
8. Explain why all forms of education in France should have experienced such a marked expansion and development after 1875.
9. Explain why great military disasters, for the past 150 years, have nearly always resulted in national educational reorganization.
10. Appraise the work and the permanent influence of Napoleon.

SELECTED READINGS

In the accompanying *Book of Readings* the following selections are reproduced:

282. Le Brun: Founding of the School of Arts and Trades.
283. Jourdain: Refounding of the Superior Normal School.
284. Cousin: Recommendations for Education in France.
285. Guizot: Address on the Law of 1833.
286. Guizot: Principles underlying the Law of 1833.
287. Guizot: Letter to the Primary Teachers of France.
288. Arnold: Guizot's Work as Minister of Public Instruction.
289. Quinet: A Lay School for a Lay Society.
290. Ferry: Moral and Civic Instruction replaces the Religious.

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*Farrington, Fr. E. *French Secondary Schools.*
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CHAPTER XXIV

THE STRUGGLE FOR NATIONAL ORGANIZATION IN ENGLAND

I. THE CHARITABLE-VOLUNTARY BEGINNINGS

English progress a slow but peaceful evolution. The beginnings of national educational organization in England were neither so simple nor so easy as in the other lands we have described. So far this was in part due to the long-established idea, on the part of the small ruling class, that education was no business of the State; in part to the deeply ingrained conception as to the religious purpose of all instruction; in part to the fact that the controlling upper classes had for long been in possession of an educational system which rendered satisfactory service in preparing leaders for both Church and State; and in part — probably in large part — to the fact that national evolution in England, since the time of the Civil War (1642–49) has been a slow and peaceful growth, though accompanied by much hard thinking and vigorous parliamentary fighting. Since the Reformation (1534–39) and the Puritan uprising led by Cromwell (1642–49), no civil strife has convulsed the land, destroyed old institutions, and forced rapid changes in old established practices. Neither has the country been in danger from foreign invasion since that memorable week in July, 1588, when Drake destroyed the Spanish Armada and made the future of England as a world power secure.

English educational evolution has in consequence been slow, and changes and progress have come only in response to much pressure, and usually as a reluctant concession to avoid more serious trouble. A strong English characteristic has been the ability to argue rather than fight out questions of national policy; to exhibit marked tolerance of the opinions of others during the discussion; and finally to recognize enough of the proponents' point of view to be willing to make concessions sufficient to arrive at an agreement. This has resulted in a slow but a peaceful evolution, and this slow and peaceful evolution has for long been the dominant characteristic of the political, social, and educational *progress of the* English people. The whole history of the two centuries of evolution toward a national system of education is a splendid illustration of this essentially English characteristic.

Eighteenth-century educational efforts. England, it will be remembered (chapter XIX, § III), had early made marked progress in both political and religious liberty. Ahead of any other people we find there the beginnings of democratic liberty, popular enlightenment, freedom of the press, religious toleration, social reform, and scientific and industrial progress. All these influences awakened in England, earlier than in any other European nation, a rather general desire to be able to read (**R. 170**), and by the opening of the eighteenth century we find the beginnings of a charitable and philanthropic movement on the part of the churches and the upper classes to extend a knowledge of the elements of learning to the poorer classes of the population.

The Charity-School system. Most important of all was the organization, by groups of individuals (**R. 237**) and by Societies (S.P.C.K.; p. 240) formed for the purpose, and maintained by subscription (**R. 240**), collections (**R. 291**), and foundation incomes, of an extensive and well-organized system of Charity-Schools (p. 240). The "Society for the Promotion of Christian Knowledge" dates from the year 1699, and the "Society for the Propagation of the Gospel in Foreign Parts" from 1701. The first worked at home, and the second in the overseas colonies. Both did much to provide schools for poor boys and girls, furnishing them with clothing and instruction (**R. 292**), and training them in reading, writing, spelling, counting, cleanliness, proper behavior, sewing and knitting (girls), and in "the Rules and Principles of the Christian Religion as professed and taught in the Church of England"(**R. 238 b**). The Charity-School idea was in a sense an application of the joint-stock-company principle to the organization and maintenance of an extensive system of schools for the education of the children of the poor. The upper classes now united to provide, as part of a great organized charity and under carefully selected teachers (**R. 238 a**), for the more promising children of their poorer neighbors, the elements of that education which they themselves had enjoyed.

The movement spread rapidly over England (p. 241), and soon developed into a great national effort to raise the level of intelligence of the masses of the English people. Thousands of persons gave their services as directors, organizers, and teachers. Traveling superintendents were employed. A rudimentary form of teacher-training was begun.

Unlike the German States, where the State and the Church and the school had all worked together from the days of the Reformation on, the English had never known such a conception. The efforts, though, of the educated few, in the eighteenth and early nineteenth centuries, to extend the elements of learning, order, piety, cleanliness, and proper behavior to the children of the masses, formed an important substitute for the action by the Church-State which was so characteristic a feature of Teutonic lands.

We see in these eighteenth-century efforts the origin of what became known in England as "the voluntary system," and upon this voluntary support of education — private, parochial, charitable — the English people for long relied.

The Sunday-School movement. One other voluntary eighteenth-century movement of importance in the history of English educational development should be mentioned here, as it formed the connecting link between the parochial-charity-school movement of the eighteenth century and the philanthropic period of the educational reformers of the early nineteenth. This was the Sunday-School movement, first tried by John Wesley in Savannah, in 1737, but not introduced into England until 1763. The idea amounted to little, though, until practically worked out anew (1780) by Robert Raikes, a printer of Gloucester, and described by him (1783) in his *Gloucester Journal* (**R. 293**), after he had experimented with it for three years. His printed description of the Sunday-School idea gave a national impulse to the movement, and Sunday Schools were soon established all over England to take children off the streets on Sunday and provide them with some form of secular and religious instruction.

The rapid growth of population in the towns, following the beginnings of factory life (p. 245), had created new social and economic problems, and the neglect of children in the manufacturing towns had shocked many thinking persons. The way in which parents and children, freed from hard labor in the factories on Sundays, abandoned themselves to vice, drunkenness, and profanity caused many, among them Raikes himself (**R. 293**), to inquire if "something could not be done" to turn into respectable men and women "the little heathen of the neighborhood." *The Sunday* School was his answer, and the answer of many all over England. The moral and religious influence of these schools was important, and the instruction in reading and writing, meager as it was, filled a real need of the time.

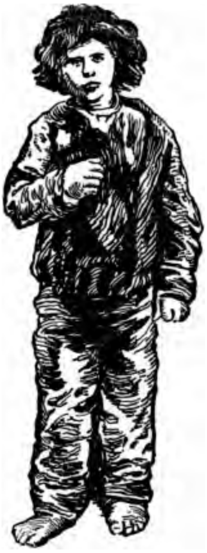


FIG. 79. A RAGGED-SCHOOL PUPIL

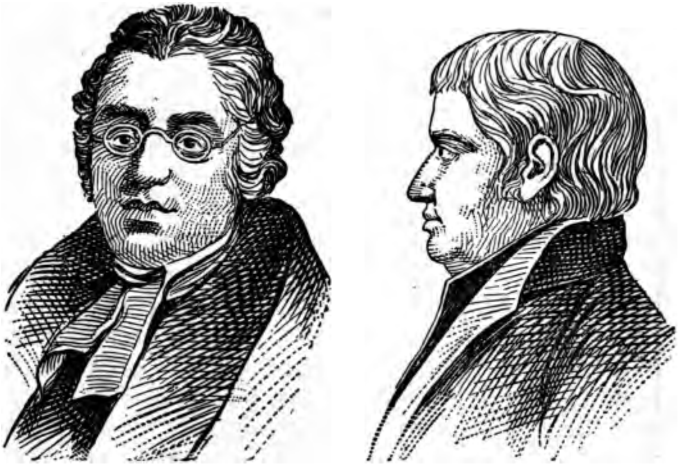
(From a photograph of a boy on entering the school; later changed into a respectable tradesman. From Guthrie)

Other voluntary schools; "Ragged Schools." The Charity Schools and the Sunday Schools were the two most conspicuous of the voluntary-organization type of undertakings for providing the poor children of England with the elements of secular and religious education. Many other organizations of an educational and charitable nature, aided also by many individual efforts, too numerous to mention, were formed with the same charitable and humanitarian end in view. Others, similar in type, charged a small fee, and hence were of the private-adventure type. Sunday Schools, day schools, evening schools, children's churches, bands of hope, clothing clubs, messenger brigades, shoeblack brigades, orphans' schools, reformatory schools, industrial schools, ragged schools — these were some of the types that arose. Upon many such forms of irregular schools England depended before the days of national organization.

II. THE PERIOD OF PHILANTHROPIC EFFORT (1800–33)

Origin of mutual or monitorial instruction. In 1797 Dr. Andrew Bell, a clergyman in the Established Church, published the results of his experiment in the use of monitors in India. The idea attracted attention, and the plan was successfully introduced into a number of charity-schools. About the same time (1798) a young Quaker schoolmaster, Joseph Lancaster by name, was led independently to a similar discovery of the advantages of using monitors, by reason of his needing assistance in his school and being too poor to pay for additional teachers. In 1803 he published an account of his plan. The two plans were quite similar, attracted attention from the first, and schools formed after one or the other of the plans were soon organized all over England.

The mutual-instruction idea spread to other lands — France, Belgium, Holland, Denmark — and seems to have been tried even in German lands. In France and Belgium it was experimented with for a time because of its cheapness, but was soon discarded because of its defects. In Teutonic lands, where the



REV. ANDREW BELL (1753–1832) JOSEPH LANCASTER (1778–1838)

FIG. 80. THE CREATORS OF THE MONITORIAL SYSTEM

much better Pestalozzian ideas had become established, the monitorial system made practically no headway. It was in the United States, of all countries outside of England, that the idea met with most ready acceptance.

The system of mutual or monitorial instruction. The great merit, aside from being cheap, of the mutual or monitorial system of instruction lay in that it represented a marked advance in school organization over the older individual method of instruction, with its accompanying waste of time and schoolroom disorder. Under the individual method only a small number of pupils could be placed under the control of one teacher, and the expense for such instruction made general education almost prohibitive. Pestalozzi, to be sure, had worked out in Switzerland the modern class-system of instruction, and following developmental lines in teaching, but of this the English were not only ignorant, but it called for a degree of pedagogical skill which their teachers did not then possess. Bell and Lancaster now evolved a plan whereby one teacher, assisted by a number of the brightest pupils whom they designated as monitors, could teach from two

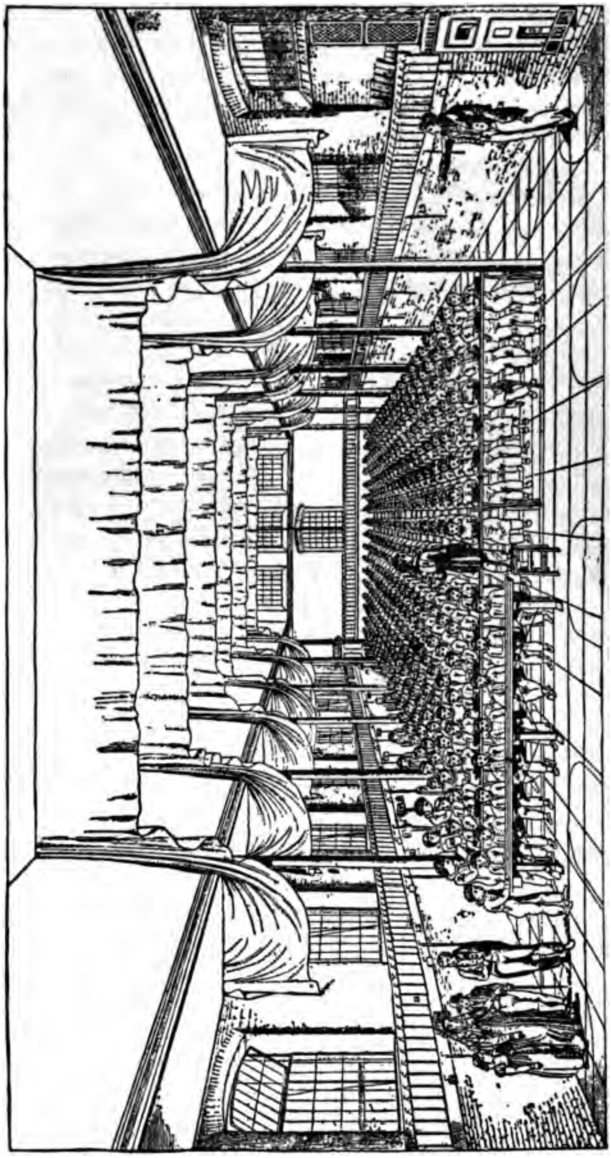


FIG. 81. THE LANCASTRIAN MODEL SCHOOL IN BOROUGH ROAD, SOUTHWARK, LONDON

This shows 365 pupils, seated for writing. The room was 40 x 90 feet in size, and contained 20 desks, each 25 feet long. The boys of each row were divided into two "drafts" of from eight to ten, each in charge of a monitor. Around the wall were 31 "stations," indicated by the semicircles on the floor.

hundred to a thousand pupils in one school (**R. 297**). The picture of Lancaster's London school (Figure 81) shows 365 pupils *seated.* The pupils were sorted into rows, and to each row was *assigned* a clever boy (monitor) to act as an assistant teacher.

A common number for each monitor to look after was ten. The teacher first taught these monitors a lesson from a printed card, and then each monitor took his row to a "station" about the wall and proceeded to teach the other boys what he had just learned. At first used only for teaching reading and the Catechism, the plan was soon extended to the teaching of writing, arithmetic, and spelling, and later on to instruction in higher branches. The system was very popular from about 1810 to 1830, but by 1840 its popularity had waned.

Such schools were naturally highly organized, the organization being largely mechanical (R. 298). Lancaster, in particular, was an organizing genius. The *Manuals of Instruction* gave complete directions for the organization and management of monitorial schools, the details of recitation work, use of apparatus, order, position of pupils at their work, and classification being minutely laid down. By carefully studying and following these directions any reasonably intelligent person could soon learn to become a successful teacher in a monitorial school.

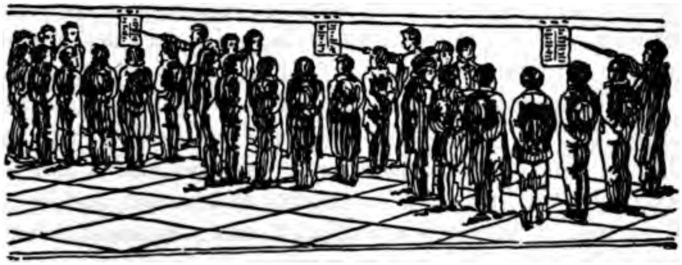


FIG. 82. MONITORS TEACHING READING AT "STATIONS"
Three "drafts" of ten each, with their toes to the semicircles painted on the floor, are being taught by monitors from lessons suspended on the wall.

The schools, mechanical as they now seem, marked a great improvement over the individual method upon which schoolmasters for centuries had wasted so much of their own and their pupils' time. In place of earlier idleness, inattention, and disorder, Bell and Lancaster introduced activity, emulation, order, and a kind of military discipline which was of much value to the type of children attending these schools. Lancaster's biographer, Salmon, has written of the system that so thoroughly was the instruction worked out that the teacher had only to organize, oversee, reward, punish, and inspire:

When a child was admitted a monitor assigned him his class; while he remained, a monitor taught him (with nine other pupils); when he was absent, one monitor ascertained the fact, and another found out the reason; a monitor examined him periodically, and, when he made progress, a monitor promoted him; a monitor ruled the writing paper; a monitor had charge of slates and books; and a monitor-general looked after all the other monitors. Every monitor wore a leather ticket, gilded and lettered, "Monitor of the First Class," "Reading Monitor of the Second Class," etc.

Value of the system in awakening interest. The monitorial system of instruction, coming at the time it did, exerted a very important influence in awakening interest in and a sentiment for schools. It increased the number of people who possessed the elements of an education; made schools much more talked about; and aroused thought and provoked discussion on the question of education. It did much toward making people see the advantages of a certain amount of schooling, and be willing to contribute to its support. Under the plans previously in use education had been a slow and an expensive process, because it had to be carried on by the individual method of instruction, and in quite small groups. Under this new plan it was now possible for one teacher to instruct 300, 400, 500, or more pupils in a single room, and to do it with much better results in both learning and discipline than the old type of schoolmaster had achieved.

All at once, comparatively, a new system had been introduced which not only improved and popularized, but tremendously cheapened education. Lancaster, in his *Improvements in Education*, gave the annual cost of schooling under his system as only seven shillings sixpence ($1.80) per pupil, and this was later decreased to four shillings fivepence ($1.06) as the school was increased to accommodate a thousand pupils. Under the Bell system the yearly cost per pupil, in a school of five hundred, was only four shillings twopence ($1.00), in 1814. In the United States, Lancastrian schools cost from $1.22 per pupil in New York, in 1822, up to $3.00 and $4.00 later on. To prepare skilled masters and mistresses for the schools — girls were provided for in many places —training or model schools were organized by both the national societies, and these represent the beginnings of normal-school training in England.

Infant Schools. Another type of school which became of much importance in England, and spread to other lands, was the **Infant** *School.* This owed its origin to Robert Owen, proprietor of the cotton mills at New Lanark, Scotland. Being of a philanthropic turn of mind, and believing that man was entirely the product of circumstance and environment, he held that it was not possible to begin too early in implanting right habits and forming character. Poverty and crime, he believed, were results of errors in the various systems of education and government. So plastic was child nature, that society would be able to mould itself "into the very image of rational wishes and desires." That "the infants of any one class in the world may be readily formed into men of any other class," was a fundamental belief of his.

FIG. 83
ROBERT OWEN
(1771–1858)

When he took charge of the mills at New Lanark (1799) he found the usual wretched social conditions of the time. Children of five, six, and seven years were bound out to the factory as apprentices (**R. 242**) for a period of nine years. They worked as apprentices and helpers in the factories twelve to thirteen hours a day, and at early manhood were turned free to join the ignorant mass of the population. Owen sought to remedy this condition. He accordingly opened schools which children might enter at three years of age, receiving them into the schools almost as soon as they were able to walk, and caring for them while their parents were at work. Children under ten he forbade to work in the mills, and for these he provided schools. The instruction for the children younger than six was to be "whatever might be supposed useful that they could understand," and much was made of singing, dancing, and play. Moral instruction was made a prominent feature. By 1814 his work and his schools had become famous. In 1817 he published a plan for the organization of such industrial communities as he conducted. In 1818 he visited Switzerland, and saw Pestalozzi and Fellenberg.

Unlike the monitorial schools, the Infant Schools were based on the idea of small-group work, and were usually conducted in harmony with the new psychological conceptions of instruction which had been worked out by Pestalozzi, and had by that time begun to be introduced into England. The Infant-School idea came at an opportune time, as the defects of the mechanical *Lancastrian instruction* were becoming evident and its popularity was waning. It gave a new and a somewhat deeper philosophical interpretation of the educational process, created a stronger demand than had before been known for trained teachers, established a preference for women teachers for primary work, and tended to give a new dignity to teaching and school work by revealing something of a psychological basis for the instruction of little children. It also contributed its share toward awakening a sentiment for national action.

Work of the educational societies. The work of the voluntary and philanthropic educational societies in establishing schools and providing teachers and instruction before the days of national schools was enormous. Though the State did nothing before 1833, and little before 1870, the work of the educational societies was large and important. After about 1820–25 the rising interest in elementary education expressed itself in the formation of many additional societies. Some of these were formed to found and support schools, and some engaged primarily in the work of propaganda in an effort to secure some national action.

III. THE STRUGGLE FOR NATIONAL EDUCATION

The parliamentary struggle. During the whole of the eighteenth century Parliament had enacted no legislation relating to elementary education, aside from the one Act of 1767 for the education of pauper children in London, and the freeing of elementary schools, Dissenters, and Catholics, from inhibitions as to teaching. In the nineteenth century this attitude was to be changed, though slowly, and after three quarters of a century of struggle the beginnings of national education were finally to be made for England, as they had by then for every other great nation. In 1870 the "no-business-of-the-State" attitude toward the education of the people, which had persisted from the days of the great Elizabeth, was finally and permanently changed. The legislative battle began with the first Factory Act of 1802, Whitbread's Parochial Schools Bill of 1807, and Brougham's first Parliamentary Committee of Inquiry of 1816 (**R. 291**); it finally culminated with the reform of the old endowed Grammar Schools by the Act of 1869, the enactment of the Elementary Education Act of 1870 (**R. 304**), and the Act of 1871 freeing instruction in the universities from religious restrictions (**R. 305**). The first of these enactments declared clearly the right of the State to *inquire into,* reorganize, and redirect the age-old educational foundations for secondary education; the second made the definite though tardy beginnings of a national system of elementary education for England; and the third opened up a university career to the whole nation. The agitation and conflict of ideas was long drawn out, and need not be traced in detail.

The leaders in the conflict. The main leader in the parliamentary struggle to establish national education, from the death of Whitbread, in 1815, to about 1835, was Henry, afterwards Lord Brougham. He was aided by such men as Blackstone, and Bentham and his followers, and, after about 1837, by such men as Dickens, Carlyle, Macaulay, and John Stuart Mill. Dickens, by his descriptions, helped materially to create a sentiment favorable to education, as a right of the people rather than a charity. He stood strongly for a compulsory and non-sectarian state system of education that would transform the children of his day into generous, self-respecting, and intelligent men and women. Carlyle saw in education a cure for social evils, and held that one of the first functions of government was to impart the gift of thinking to its future citizens.

Brougham was untiring in his efforts for popular education, and some idea as to the interest he awakened may be inferred from the fact that his *Observations on the Education of the People*, published in 1825, went through twenty editions the first year. He introduced bills, secured committees of inquiry, made addresses, and used his pen in behalf of the education of the people. His belief in the power of education to improve a people was very large. Warning the "Lawgivers of England" to take heed, he once said:

> Let the soldier be abroad, if he will; he can do nothing in this age. There is another personage abroad, a person less imposing—in the eye of some insignificant. The Schoolmaster is abroad, and I trust him, armed with his primer, against the soldier in full uniform array.

FIG. 84
LORD BROUGHAM
(1778–1868)

Parallel with the agitation for some state action for education was an agitation for social and political reform. The basis for the election of members to the House of Commons was still mediæval. *Boroughs no longer* inhabited still returned members, and sparsely settled regions returned members out of all proportion to the newly created city populations. Few, too, could vote. Only about 160,000 persons in a population of 10,000,000 had, early in the century, the right of the franchise. The city populations were practically disfranchised in favor of rural landlords, the nobility, and the clergy. In 1828 Protestant Non-Conformists were relieved of their political disability, and in 1829 a similar enfranchisement was extended to Catholics. In 1832 came the first real voting reform in the passage of the so-called *Third Reform Bill*, after a most bitter parliamentary struggle. This reapportioned the membership of the House on a more equitable basis, and enfranchised those who owned or leased lands or buildings of a value of £10 a year. The result of this was to enfranchise the middle class of the population; increase the number of voters (1836) from about 175,000 to about 839,500 out of 6,023,000 adult males; and effectively break the power of the House of Lords to elect the House of Commons. Progressive legislation now became much easier to secure, and in 1833 a Bill making a grant of £20,000 a year to aid in building schoolhouses for elementary schools — the first government aid for elementary education ever voted in England — became a law (**R. 299**).

Progress after 1833. The Law of 1833, though, made but the merest beginnings, and up to 1840 the money granted was given to the two great national school societies, and without regulation. Beginning in 1840, and continuing up to the beginnings of national education, in 1870, the grants were state-controlled and distributed through the different educational societies. Proposals to add local taxation, in 1853 and 1856, were dropped almost as soon as made. Training-schools for teachers also were begun, and aided by grants. In 1845 the English "pupil-teacher" system also was begun in an effort to supply teachers of some little training. A State Department of Education was created, in 1856, though without much power.

Difficulties encountered. In the meantime liberal leaders, Schools Inquiry Commissions, official reports, and educational propagandists continued to pile up evidence as to the inadequacy of the old voluntary system. A few examples, out of hundreds that might be cited, will be mentioned here. Lord Macaulay, in an address made in Parliament, in 1847 (**R. 300**), defending a "Minute" of the "Committee of Privy Council on Education" (created in 1839) proposing the nationalization of education, held it to be "the right and duty of the State to provide for the education of the common people," as an exercise of self-protection, and warned the Commons of dangers to come if the progressive tendencies of the time were not listened to. The Reports of the school inspectors, too, revealed conditions in need of being remedied in all phases of educational effort. The Report on the Apprenticing of Pauper Children (**R. 301**) is selected as typical of many similar reports.

FIG. 85
LORD MACAULAY
(1800–59)

So deeply ingrained, though, was the English conception of education as a private and voluntary and religious affair and no business of the State; so self-contained were the English as a people; and so little did they know or heed the progress made in other lands, that the arguments for national action encountered tremendous opposition from the Conservative elements, and often were opposed even by Liberals.

The beginnings of national organization. By 1865 it had become evident to a majority that the voluntary system, whatever its merits, would never succeed in educating the nation, and from this time forth the demand for some acceptable scheme for the organization of national education became a part of a still more general movement for political and social reform. Once more, as in 1832–33, an education law was enacted following the passage of a bill for electoral reform and the extension of the suffrage.

Though the Liberal Party was in power, it was well satisfied with the Reform Act of 1832 because through it the middle classes of the population, which the Liberal Party represented, had gained control of the government. The country, though, was not — the working-classes in particular demanding a share in the government. Finally the demand became too strong to be resisted, and the Second Reform Act, of 1867, became a law. This abolished a number of the remaining smaller boroughs, and gave the vote to a vastly increased number of people, particularly city workers. It was a political revolution for England of great magnitude.

From the passage of this new Reform Act to 1870, the *organization of national education* only awaited the formulation of some acceptable scheme. "We must educate our new masters," now became a common expression. The main question was how to create schools to do what the voluntary schools had shown themselves able to do for a part, but were unable to do for all, without at the same time destroying the vast denominational system that, in spite of its defects, had "done the great service of rearing a race of teachers, spreading schools, setting up a standard of education, and generally making the introduction of a national system possible."

The Elementary Education Bill of 1870 (R. 304) preserved the existing Voluntary Schools; divided the country up into school districts; gave the denominations a short period in which to provide schools, with aid for buildings; and thereafter, in any place where a deficiency in school accommodations could be shown to exist, School Boards were to be elected, and they should have power to levy taxes and maintain elementary schools. Existing Voluntary Schools might be transferred to the School Boards, whose schools were to be known as Board Schools. The schools were not ordered made free, but the fees of necessitous children were to be provided for by the School Boards, and they might compel the attendance of all children between the ages of five and twelve. Inspection and grants were limited to secular subjects, though religious teaching was not forbidden. The central government was to be secular and neutral; the local boards might decide as they saw fit. Such were the beginnings of national education in England.

In 1880 elementary education had been made fully compulsory, and in 1891 largely free. In 1893 the age for exemption from attendance was fixed at eleven, and in 1899 this was raised to twelve. In 1888 county and borough councils had been created, better to enforce the Act and to extend supervision. In 1899 a Central Board of Education, under a President and a Parliamentary Secretary, was created.

In 1902, for the first time in English history, education of all grades — elementary, secondary, and higher; voluntary and state — was brought under the control of one single local authority, and Voluntary Schools were taken over and made a charge on the "rates" equally with the Board Schools. New local Educational Committees and Councils replaced the old School Boards, and all secular instruction in state-aided schools of all types was now placed under their control. Religious instruction could continue where desired. In addition, one third of the property of England, which had heretofore escaped all direct taxation for education, was now compelled to pay its proper share. The foundation principle that "the wealth of the State must educate the children of the State" was now applied, for the first time.

By the time of the opening of the recent World War it may be said that English opinion had about agreed upon the principle of public control of all schools, absolute religious freedom for teachers, local option as to religious instruction, large local liberty in management and control, well-trained and well-paid teachers, and the fusing of all types of schools into a democratic and truly national school system, strong in its unity and national elements, but free from centralized bureaucratic control. It was left for the World War to give emphasis to this national need and to permit of the final creation of such an educational organization.

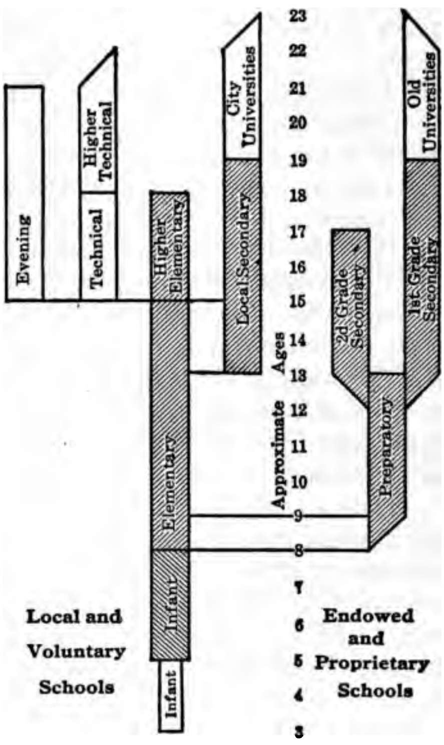


FIG. 86. THE ENGLISH EDUCATIONAL SYSTEM AS FINALLY EVOLVED

The years, for the divisions of English education, are only approximate, as English education is more flexible than that found in most other lands.

A national system at last evolved. It is a little more than two centuries from the founding of the Society for the Promotion of Christian Knowledge (1699) to the very important Fisher Education Act of August, 1918. The first marked the beginnings of the voluntary system; the second "the first real attempt in England to lay broad and deep the foundations of a scheme of education which would be truly national." This Act, passed by Parliament in the midst *of a war which called* upon the English people for heavy sacrifices, completed the evolution of two centuries and organized the educational resources — elementary, secondary, evening, adult, technical, and higher — into one national system, animated by a national purpose, and aimed at the accomplishment for the nation of twentieth-century ends on the most democratic basis of any school system in Europe. In so doing Huxley's educational ladder has not only been changed into a broad highway, but the educational traditions of England (**R.** 306) have been preserved and moulded anew.

The central national supervisory authority has been still further strengthened; the compulsion to attend greatly extended; and the voice of the State has been uttered in a firmer tone than ever before in English educational history. Taxes have been increased; the scope of the school system extended; all elements of the system better integrated; laggard local educational authorities subjected to firmer control; the training of teachers looked after more carefully than ever before; and the foundations for unlimited improvement and progress in education laid down. Still, in doing all this, the deep English devotion to local liberties has been clearly revealed. The dangers of a centralized French-type educational bureaucracy have been avoided; necessary, and relatively high, minimum standards have been set up, but without sacrificing that variety which has always been one of the strong points of English educational effort; and the legitimate claims of the State have been satisfied without destroying local initiative and independence. In this story of two centuries and more of struggle to create a really national system of education for the people we see strongly revealed those prominent characteristics of English national progress — careful consideration of new ideas, keen sensitiveness to vested rights, strong sense of local liberties and responsibilities, large dependence on local effort and good sense, progress by compromise, and a slow grafting-on of the best elements of what is new without sacrificing the best elements of what is old.

QUESTIONS FOR DISCUSSION

1. Show that the English method of slow progress and after long discussion would naturally result in a plan bearing evidence of many compromises.
2. What does the extensive Charity-School movement in eighteenth-century England indicate as to the comparative general interest in learning in *England* and the other lands we have previously studied?
3. Show how the Sunday-School instruction, meager as it was, was very

important in England in paving the way for further educational progress.

4. What do all the different late eighteenth-century voluntary educational movements indicate as to comparative popular interest in education in England and Prussia? England and France?
5. Can you explain the much greater percentage of city poor in England in the late eighteenth and early nineteenth centuries than in French or German lands?
6. Can you explain why periods of prolonged warfare are usually followed by periods of social and political unrest?
7. Can you explain why Pestalozzian ideas found such slow acceptance in England?
8. Explain, on the basis of the English adult manufacturing conception of education, why monitorial instruction was hailed as "a new expedient, parallel and rival to the modern inventions in the mechanical departments."
9. To what extent do we now accept Robert Owen's conception of the influence of education on children?
10. Show how the many philanthropic societies for the education of the children of the poor came in as a natural transition from church to state education.
11. Show the importance of the School Societies in accustoming people to the idea of free and general education.
12. Show how the Lancastrian system formed a natural bridge between private philanthropy in education and tax-supported state schools.
13. Why were the highly mechanical features of the Lancastrian organization so advantageous in its day, whereas we of to-day would regard them as such a disadvantage?
14. Explain how the Lancastrian schools dignified the work of the teacher by revealing the need for teacher-training.
15. Show how English educational development during the nineteenth century has been deeply modified by the progress of democracy.
16. Show how the English have attained to minimum standards without imposing uniform requirements that destroy individuality and initiative.

SELECTED READINGS

In the accompanying *Book of Readings* the following illustrative selections are reproduced:

291. Parliamentary Report: Charity-School Education described.
292. S.P.C.K.: Cost and Support of Charity-Schools.
293. Raikes: Description of the Gloucester Sunday Schools.
294. Guthrie: Organization, Support, and Work of a Ragged School.
295. Smith, A.: On the Education of the Common People.
296. Malthus: On National Education.
297. Smith, S.: The School of Lancaster described.
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CHAPTER XXV

AWAKENING AN EDUCATIONAL CONSCIOUSNESS IN THE UNITED STATES

I. EARLY NATIONAL ATTITUDES AND INTERESTS

The American problem. The beginnings of state educational organization in the United States present quite a different history from that just traced for Prussia, France, or England. While the parochial school existed in the Central Colonies, and in time had to be subordinated to state ends; and while the idea of education as a charity had been introduced into all the Anglican Colonies, and later had to be stamped out; the problem of educational organization in America was not, as in Europe, one of bringing church schools and old educational foundations into harmonious working relations with the new state school systems set up. Instead the old educational foundations were easily transformed to adapt them to the new conditions, while only in the Central Colonies did the religious-charity conception of education give any particular trouble. The American educational problem was essentially that of first awakening, in a new land, a consciousness of need for general education; and second, that of developing a willingness to pay for what it finally came to be deemed desirable to provide.

By the middle of the eighteenth century, as we have pointed out (p. 285), the earlier religious interests in America had clearly begun to wane. In the New England Colonies the school of the civil town had largely replaced the earlier religious school. In the Middle Colonies many of the parochial schools had died out. In the Southern Colonies, where the classes in society and negro slavery made common schools impossible, and the lack of city life and manufacturing made them seem largely unnecessary, the common school had tended to disappear. Even in New England, where the Calvinistic conception of the importance of education had most firmly established the idea of school support, the eighteenth century witnessed a constant struggle to prevent the dying-out of that which an earlier generation had deemed it important to create.

Effect of the war on education. The effect of the American *War for Independence,* on all types of schools, was disastrous.

The growing troubles with the mother country had, for more than a decade previous to the opening of hostilities, tended to concentrate attention on other matters than schooling. Political discussion and agitation had largely monopolized the thinking of the time.

With the outbreak of the war education everywhere suffered seriously. Most of the rural and parochial schools closed, or continued a more or less intermittent existence. In New York City, then the second largest city in the country, practically all schools closed with British occupancy and remained closed until after the end of the war. The Latin grammar schools and academies often closed from lack of pupils, while the colleges were almost deserted. Harvard and Kings, in particular, suffered grievously, and sacrificed much for the cause of liberty. The war engrossed the energies and the resources of the peoples of the different Colonies, and schools, never very securely placed in the affections of the people, outside of New England, were allowed to fall into decay or entirely disappear. Meager as were the opportunities for schooling before 1775, the opportunities by 1790, except in a few cities and in the New England districts, had shrunk almost to the vanishing point. For Boston (**R.** 307), Providence (**Rs.** 309, 310), and a number of other places we have good pictures preserved of the schools which actually did exist.

No real educational consciousness before about 1820. Regardless of the national land grants for education made to the new States (p. 371), the provisions of the different state constitutions (**R.** 259), the beginnings made here and there in the few cities of the time, and the early state laws (**R.** 262), it can hardly be said that the American people had developed an educational consciousness, outside of New England and New York, before about 1820, and in some of the States, especially in the South, a state educational consciousness was not awakened until very much later. Even in New England there was a steady decline in education during the first fifty years of the national history.

There were many reasons in the national life for this lack of interest in education among the masses of the people. The simple agricultural life of the time, the homogeneity of the people, the absence of cities, the isolation and independence of the villages, the lack of full manhood suffrage in a number of the States, the want of any economic demand for education, and the fact that no important political question calling for settlement at the polls had as yet arisen, made the need for schools and learning seem a relatively minor one.

When the people had finally settled their political and commercial future by the War of 1812–14, and had built up a national consciousness on a democratic basis in the years immediately following, and the Nation at last possessed the energy, the money, and the interest for doing so, they finally turned their energies toward the creation of a democratic system of public schools. In the meantime, education, outside of New England, and in part even there, was left largely to private individuals, churches, incorporated school societies, and such state schools for the children of the poor as might have been provided by private or state funds, or the two combined.

The real interest in advanced education. In so far as the American people may be said to have possessed a real interest in education during the first half-century of the national existence, it was manifested in the establishment and endowment of academies and colleges rather than in the creation of schools for the people. The colonial Latin grammar school had been almost entirely an English institution, and never well suited to American needs. As democratic consciousness began to arise, the demand came for a more practical institution, less exclusive and less aristocratic in character, and better adapted in its instruction to the needs of a frontier society. Arising about the middle of the eighteenth century, a number of so-called Academies had been founded before the new National Government took shape. While essentially private institutions, arising from a church foundation, or more commonly a local subscription or endowment, it became customary for towns, counties, and States to assist in their maintenance, thus making them semi-public institutions. Their management, though, usually remained in private hands, or under boards or associations.

Beside offering a fair type of higher training before the days of high schools, the academies also became training-schools for teachers, and before the rise of the normal schools were the chief source of supply for the better grade of elementary teachers. These institutions rendered an important service during the first half of the nineteenth century, but were in time displaced by the publicly supported and publicly controlled American high school, the first of which dates from 1821. This evolution we shall *describe more in detail* a little later on.

The colleges of the time. Some interest also was taken in college education during this early national period. College attendance, however, was small, as the country was still new and the people were poor. As late as 1815, Harvard graduated a class of but 66; Yale of 69; Princeton of 40; Williams of 40; Pennsylvania of 15; and the University of South Carolina of 37. After the organization of the Union the nine old colonial colleges were reorganized, and an attempt was made to bring them into closer harmony with the ideas and needs of the people and the governments of the States. Dartmouth, Kings (now rechristened Columbia), and Pennsylvania were for a time changed into state institutions, and an unsuccessful attempt was made to make a state university for Virginia out of William and Mary. Fifteen additional colleges were organized by 1800, and fourteen more by 1820. Between 1790 and 1825 there was much discussion as to the desirability of founding a national university at the seat of government, and Washington in his will (1799) left, for that time, a considerable sum to the Nation to inaugurate the new undertaking. Nothing ever came of it, however. Before 1825 six States — Georgia, Virginia, North Carolina, South Carolina, Indiana, and Michigan — had laid the foundations of future state universities. The National Government had also granted to each new Western State two entire townships of land to help endow a university in each — a stimulus which eventually led to the establishment of a state university in every Western State.

A half-century of transition. The first half-century of the national life may be regarded as a period of transition from the church-control idea of education over to the idea of education under the control of and supported by the State. Though many of the early States had provided for state school systems in their constitutions (**R.** 259), the schools had not been set up, or set up only here and there. It required time to make this change in thinking. Up to the period of the beginnings of our national development education had almost everywhere been regarded as an affair of the Church, somewhat akin to baptism, marriage, the administration of the sacraments, and the burial of the dead. Even in New England, which formed an exception, the evolution of the civic school from the church school was not yet complete.

The church charity-school had become, as we have seen (p. 240), a familiar institution before the Revolution. The different churches after the war continued their efforts to maintain their church charity-schools, though there was for a time a decrease in both their numbers and their effectiveness.

In the meantime the demand for education grew rather rapidly, and the task soon became too big for the churches to handle. For long the churches made an effort to keep up, as they were loath to relinquish in any way their former hold on the training of the young. The churches, however, were not interested in the problem except in the old way, and this was not what the new democracy wanted. The result was that, with the coming of nationality and the slow but gradual growth of a national consciousness, national pride, national needs, and the gradual development of national resources in the shape of taxable property — all alike combined to make secular instead of religious schools seem both desirable and possible to a constantly increasing number of citizens.

II. AWAKENING AN EDUCATIONAL CONSCIOUSNESS

Between about 1810 and 1830 a number of new forces — philanthropic, political, social, economic — combined to change the earlier attitude by producing conditions which made state rather than church control and support of education seem both desirable and feasible. The change, too, was markedly facilitated by the work of a number of semi-private philanthropic agencies which now began the work of founding schools and building up an interest in education, the most important of which were: (1) the Sunday-School movement; (2) the City School Societies; (3) the Lancastrian movement; and (4) the Infant-School Societies. These will be described briefly, and their influence in awakening an educational consciousness pointed out.

The Sunday-School movement. The Sunday School, as a means of providing the merest rudiments of secular and religious learning, had been made, through the initiative of Raikes of Gloucester (p. 337), a very important English institution for providing the beginnings of instruction for the children of the city poor. Raikes's idea was soon carried to the United States. In 1791 "The First Day, or Sunday School Society," was organized at Philadelphia, for the establishment of Sunday Schools in that city. In 1793 Katy Ferguson's "School for the Poor" was opened in New York, and this was followed by an organization of New York women for the extension of secular instruction among the poor. In 1797 Samuel Slater's Factory School was opened at

Pawtucket, Rhode Island. These American Sunday Schools, being open to all instead of only to the poor and lowly, had a small but an increasing influence in leveling class distinctions and in making a common day school seem possible. The movement for secular instruction on Sundays, though, soon met in America with the opposition of the churches, and before long they took over the idea, superseded private initiative and control, and changed the character of the instruction from a day of secular work to an hour or so of religious teaching. The Sunday School, in consequence, never exercised the influence in educational development in America that it did in England.

The City School Societies. These were patterned after the English charity-school subscription societies, and were formed in a number of American cities during the first quarter of the nineteenth century for the purpose of providing the rudiments of an education to those too poor to pay for schooling. These Societies were usually organized by philanthropic citizens, willing to contribute something yearly to provide some little education for a few of the many children in the city having no opportunities for any instruction. A number of these Societies were able to effect some financial connection with the city or the State.

"The Public School Society." Perhaps the most famous of all the early subscription societies for the maintenance of schools for the poor was the "New York Free School Society," which later changed its name to that of "The Public School Society of New York." This was organized, in 1805, under the leadership of De Witt Clinton, then mayor of the city, he heading the subscription list with a promise of $200 a year for support. On May 14, 1806, the following advertisement appeared in the daily papers:

> **FREE SCHOOL**
>
> **The Trustees of the Society for establishing a Free School in the city of New York, for the education of such poor children as do not belong to, or are not provided for by any religious Society, having engaged a Teacher, and procured a School House for the accommodation of a School, have now the pleasure of announcing that it is proposed to receive scholars of the descriptions alluded to without delay; applications may be made to, &c.**

Four days later the officers of the Society issued a general appeal to the public (R. 311), setting forth the purposes of the *Society* and soliciting funds.

This Society was chartered by the legislature "to provide schooling for all children who are the proper objects of a gratuitous education." It organized free public education in the city, secured funds, built schoolhouses, provided and trained teachers, and ably supplemented the work of the private and church schools. By its energy and its persistence it secured for itself a large share of public confidence, and aroused a constantly increasing interest in the cause of popular education. In 1853, after it had educated over 600,000 children and trained over 1200 teachers, this Society, its work done, surrendered its charter and turned over its buildings and equipment to the public-school department of the city, which had been created by the legislature in 1842.

School Societies elsewhere. The "Benevolent Society of the City of Baltimore for the Education of the Female Poor," founded in 1799, and the "Male Free Society of Baltimore," organized a little later, were other of these early school societies, though neither became so famous as the Public School Society of New York. The schools of the city of Washington were started by subscription, in 1804, and for some time were in part supported by subscriptions from public-spirited citizens. This society did an important work in accustoming the people of the capital city to the provision of some form of free education.

In 1800 "The Philadelphia Society for the Free Instruction of Indigent Boys" was formed, which a little later changed to "The Philadelphia Society for the Establishment and Support of Charity Schools." In 1814 "The Society for the Promotion of a Rational System of Education" was organized in Philadelphia, and four years later the public sentiment awakened by a combination of the work of this Society and the coming of the Lancastrian system of instruction enabled the city to secure a special law permitting Philadelphia to organize a system of city schools for the education of the children of its poor. Other societies which rendered useful educational service include the "Mechanics and Manufacturers Association," of Providence, Rhode Island, organized in 1789 (**Rs. 308, 310**); "The Albany Lancastrian School Society," organized in 1826, for the education of the poor of the city in monitorial schools; and the school societies organized in Savannah in 1818, and Augusta, in 1821, "to afford education to the children of indigent parents." Both these Georgia societies received some support from state funds.

The formation of these school societies, the subscriptions made by the leading men of the cities, the bequests for education, and the grants of some city and state aid to these societies, all of which in time became somewhat common, indicate a slowly rising interest in providing schools for the education of all. This rising interest in education was greatly stimulated by the introduction from England, about this time, of a new and what for the time seemed a wonderful system for the organization of education, the Lancastrian monitorial plan.

The Lancastrian monitorial schools. Church-of-England ideas were not in much favor in the United States for some time after the close of the Revolutionary War, and in consequence it was the Lancastrian plan which was brought over and popularized. In 1806 the first monitorial school was opened in New York City, and, once introduced, the system quickly spread from Massachusetts to Georgia, and as far west as Louisville and Detroit. In 1818 Lancaster himself went to America, and was received with much distinction. Most of the remaining twenty years of his life were spent in organizing and directing schools in various parts of the United States.

In many of the rising cities of the eastern part of the country the first free schools established were Lancastrian schools. The system provided education at so low a cost (p. 360) that it made the education of all for the first time seem possible. The first free schools in Philadelphia (1818) were an outgrowth of Lancastrian influence, as was also the case in many other Pennsylvania cities. Baltimore began a Lancastrian school six years before the organization of public schools was permitted by law. A number of monitorial high schools were organized in different parts of the United States, and it was even proposed that the plan should be adopted in the colleges. A number of New England cities, that already had other type schools, investigated the new monitorial plan and were impressed with its many important points of superiority over methods then in use. The Report of the Investigating Committee (1828) for Boston (**R. 312**), forms a good example of such. It is not strange that the new plan aroused widespread enthusiasm in many discerning men, and for almost a quarter of a century was advocated as the best system of education then known. As in England, though, the system was very popular from about 1810 to 1830, but by 1840 its popularity was over.

The Lancastrian schools materially hastened the adoption of the free school system in all the Northern States by gradually accustoming people to bearing the necessary taxation which free schools entail. They also made the common school common and much talked of, and awakened thought and provoked discussion on the question of public education. They likewise dignified the work of the teacher by showing the necessity for teacher-training. The Lancastrian Model Schools, first established in the United States in 1818, were the precursors of the American normal schools.

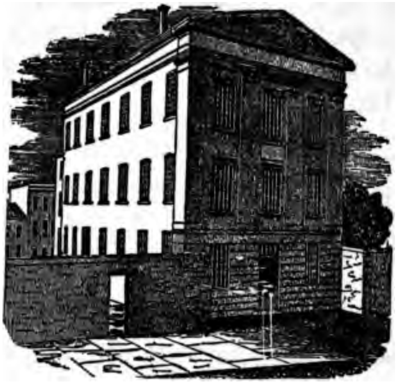

FIG. 87
"MODEL" SCHOOL BUILDING OF THE PUBLIC SCHOOL SOCIETY

Erected in 1843. Cost (with site), $17,000. A typical New York school building, after 1830. The infant or primary school was on the first floor, the second floor contained the girls' school, and the third floor the boys' school. Each floor had one large room seating 252 children; the primary schoolroom could be divided into two rooms by folding doors, so as to segregate the infant class. This building was for long regarded as the perfection of the builder's art, and its picture was printed for years on the cover of the Society's Annual Reports.

Coming of the Infant School. A curious early condition in America was that, in some of the cities where public schools had been established, by one agency or another, no provision had been made for beginners. These were supposed to obtain the elements of reading at home, or in the Dame Schools. In Boston, for example, where public schools were maintained by the city, no children could be received into the schools who had not learned to read and write (**R.** 314 **a**). This made the common age of admission somewhere near eight years. The same was in part true of Hartford, New York, Philadelphia, Baltimore, and other cities. When the monitorial schools were established they tended to restrict their membership in a similar manner, though not always able to do so.

In 1816 there came to America, also from England, a valuable supplement to education as then known in the form of the so-called Infant Schools (p. 361). First introduced at Boston (**R.** 313), the Infant Schools proved popular, and in 1818 the city appropriated $5000 for the purpose of organizing such schools to supplement the public-school system. These were to admit *children at four years* of age, were to be known as primary schools.

were to be taught by women, were to be open all the year round, and were to prepare the children for admission to the city schools, which by that time had come to be known as English grammar schools. Providence, similarly, established primary (Infant) schools in 1828 for children between the ages of four and eight, to supplement the work of the public schools, there called writing schools.

For New England the establishment of primary schools virtually took over the Dame School instruction as a public function, and added the primary grades to the previously existing school. We have here the origin of the division, often still retained at least in name in the Eastern States, of the "primary grades" and the "grammar grades" of the elementary school.

Primary education organized. The Infant-School idea was soon somewhat generally adopted by the Eastern cities, and

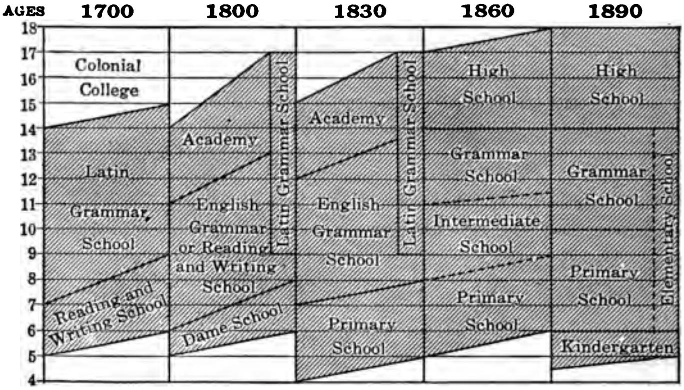

FIG. 88. EVOLUTION OF THE ESSENTIAL FEATURES OF THE AMERICAN PUBLIC SCHOOL SYSTEM

changed somewhat to make of it an American primary school. Where children had not been previously admitted to the schools without knowing how to read, as in Boston, they supplemented the work of the public schools by adding a new school beneath. Where the reverse had been the case, as in New York City, the organization of Infant Schools as Junior Departments enabled the existing schools to advance their work. Everywhere it resulted, eventually, in the organization of primary and grammar school departments, often with intermediate departments in between, *and, with* the somewhat contemporaneous evolution of the first *high schools,* the main outlines of the American free public-school *system* were now complete.

These four important educational movements — the secular Sunday School, the semi-public city School Societies, the Lancastrian plan for instruction, and the Infant-School idea — all arising in philanthropy, came as successive educational ideas to America during the first half of the nineteenth century, supplemented one another, and together accustomed a new generation to the idea of a common school for all.

III. SOCIAL, POLITICAL, AND ECONOMIC INFLUENCES

It is hardly probable, however, that these philanthropic efforts alone, valuable as they were, could have resulted in the great American battle for tax-supported schools, at as early a date as this took place, had they not been supplemented by a number of other movements of a social, political, and economic character which in themselves materially changed the nature and direction of our national life. The more important of these were: (1) The rise of cities and of manufacturing, (2) the extension of the suffrage, and (3) the rise of new class-demands for schools.

Growth of city population and manufacturing. At the time of the inauguration of the National Government nearly every one in America lived on the farm or in some little village. The first forty years of the national life were essentially an agricultural and a pioneer period. Even as late as 1820 there were but thirteen cities of 8000 inhabitants or over in the whole of the twenty-three States at that time comprising the Union, and these thirteen cities contained but 4.9 per cent of the total population of the Nation.

After about 1825 these conditions began to change. By 1820 many little villages were springing up, and these frequently proved the nuclei for future cities. In New England many of these places were in the vicinity of some waterfall, where cheap power made manufacturing on a large scale possible. Lowell, Massachusetts, which in 1820 did not exist and in 1840 had a population of over twenty thousand people, collected there largely to work in the mills, is a good illustration. Other cities, such as Cincinnati and Detroit, grew because of their advantageous situation as exchange and wholesale centers. With the revival of trade and commerce after the second war with Great Britain the cities grew rapidly both in number and size.

The rise of the new cities and the rapid growth of the older ones materially changed the nature of the educational problem, by producing an entirely new set of social and educational conditions for the people of the Central and Northern States to solve. The South, with its plantation life, negro slavery, and absence of manufacturing was largely unaffected by these changed conditions until well after the close of the Civil War. In consequence the educational awakening there did not come for nearly half a century after it came in the North. In the cities in the coast States north of Maryland, but particularly in those of New York and New England, manufacturing developed very rapidly. Cotton-spinning in particular became a New England industry, as did also the weaving of wool, while Pennsylvania became the center of the iron manufacturing industries.

The development of this new type of factory work meant the beginnings of the breakdown of the old home and village industries, the eventual abandonment of the age-old apprenticeship system (**Rs. 200, 201**), the start of the cityward movement of the rural population, and the concentration of manufacturing in large establishments, employing many hands to perform continuously certain limited phases of the manufacturing process. This in time was certain to mean a change in educational methods. It also called for the concentration of both capital and labor. The rise of the factory system, business on a large scale, and cheap and rapid transportation, all combined to diminish the importance of agriculture and to change the city from an unimportant to a very important position in our national life. The 13 cities of 1820 increased to 44 by 1840, and to 141 by 1860. There were four times as many cities in the North, too, where manufacturing had found a home, as in the South, which remained essentially agricultural.

New social problems in the cities. The many changes in the nature of industry and of village and home life, effected by the development of the factory system and the concentration of manufacturing and population in the cities, also contributed materially in changing the character of the old educational problem. When the cities were as yet but little villages in size and character, homogeneous in their populations, and the many social and moral problems incident to the congestion of peoples of mixed character had not as yet arisen, the church and charity and private school solution of the educational problem was reasonably satisfactory. As the cities now increased rapidly in size, became more city-like in character, drew to them diverse elements previously largely unknown, and were required by state laws to extend the right of suffrage to all their citizens, the need for a new type of educational organization began slowly but clearly to manifest itself to an increasing number of citizens. The church, charity, and private school system completely broke down under the new strain. School Societies and Educational Associations, organized for propaganda, now arose in the cities; grants of city or state funds for the partial support of both church and society schools were demanded and obtained; and numbers of charity organizations began to be established in the different cities to enable them to handle better the new problems of pauperism, intemperance, and juvenile delinquency which arose.

The extension of the suffrage. The Constitution of the United States, though framed by the ablest men of the time, was framed by men who represented the old aristocratic conception of education and government. The same was true of the conventions which framed practically all the early state constitutions. The early period of the national life was thus characterized by the rule of a class — a very well-educated and a very capable class, to be sure — but a class elected by a ballot based on property qualifications and belonging to the older type of political and social thinking.

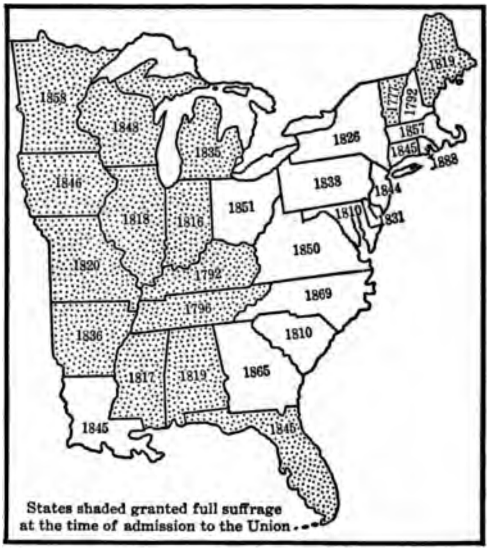

FIG. 89. DATES OF THE GRANTING OF FULL MANHOOD SUFFRAGE

Some of the older States granted almost full manhood suffrage at an earlier date, retaining a few minor restrictions until the date given on the map. States shaded granted full suffrage at the time of admission to the Union.

Notwithstanding the statements of the Declaration of Independence, the change came but slowly. Up to 1815 but four States had granted the right to vote to all male citizens, regardless of property holdings or other somewhat similar restrictions. *After 1815 a democratic* movement, which sought to abolish all class rule and all political inequalities, arose and rapidly gained strength. In this the new States to the westward, with their absence of old estates or large fortunes, and where men were judged more on their merits than in an older society, were the leaders. As will be seen from the map, every new State admitted east of the Mississippi River, except Ohio (admitted in 1802), where the New England element predominated, and Louisiana (1812), provided for full manhood suffrage at the time of its admission to statehood. Five additional Eastern States had extended the same full voting privileges to their citizens by 1845, while the old requirements had been materially modified in most of the other Northern States. This democratic movement for the leveling of all class distinctions between white men became very marked, after 1820; came to a head in the election of Andrew Jackson as President, in 1828; and the final result was full manhood suffrage in all the States. This gave the farmer in the West and the new manufacturing classes in the cities a preponderating influence in the affairs of government.

Educational significance of the extension of suffrage. The educational significance of the extension of full manhood suffrage to all was enormous and far-reaching.

There now took place in the United States, after about 1825, what took place in England after the passage of the Second Reform Act (p. 347) of 1867. With the extension of the suffrage to all classes of the population, poor as well as rich, laborer, as well as employer, there came to thinking men, often for the first time, a realization that general education had become a fundamental necessity for the State, and that the general education of all in the elements of knowledge and civic virtue must now assume that importance in the minds of the leaders of the State that the education of a few for the service of the Church and of the many for simple church membership had once held in the minds of ecclesiastics.

Governors now began to recommend to their legislatures the establishment of tax-supported schools, and public men began to urge state action and state control. After about 1825 many labor unions were formed, and the representatives of these new organizations joined in the demands for schools and education, urging the free education of their children as a natural right. Many resolutions were adopted by these organizations demanding free state-supported schools.

IV. ALIGNMENT OF INTERESTS, AND PROPAGANDA

The alignment of interests. The second quarter of the nineteenth century may be said to have witnessed the battle for tax-supported, publicly controlled and directed, and non-sectarian common schools. In 1825 such schools were still the distant hope of statesmen and reformers; in 1850 they had become an actuality in almost every Northern State. The twenty-five years intervening marked a period of public agitation and educational propaganda; of many hard legislative fights; of a struggle to secure desired legislation, and then to hold what had been secured; of many bitter contests with church and private-school interests, which felt that their "vested rights" were being táken from them; and of occasional referenda in which the people were asked, at the next election, to advise the legislature as to what to do. Excepting the battle for the abolition of slavery, perhaps no question has ever been before the American people for settlement which caused so much feeling or aroused such bitter antagonisms. The friends of free schools were at first commonly regarded as fanatics, dangerous to the State, and the opponents of free schools were considered by them as old-time conservatives or as selfish members of society.

Naturally such a bitter discussion of a public question forced an alignment of the people for or against publicly supported and controlled schools.

The work of propaganda. To meet the arguments of the objectors, to change the opinions of a thinking few into the common opinion of the many, to overcome prejudice, and to awaken the public conscience to the public need for free and common schools in such a democratic society, was the work of a generation. To convince the masses of the people that the scheme of state schools was not only practicable, but also the best and most economical means for giving their children the benefits of an education; to convince propertied citizens that taxation for education was in the interests of both public and private welfare; to convince legislators that it was safe to vote for free-school bills; and to overcome the opposition due to apathy, religious jealousies, and private interests, was the work of years. In time, though, the desirability of common, free, tax-supported, non-sectarian, state-controlled schools became evident to a majority of the citizens in the different *American States*, and as it did the American State School, free and equally open to all, was finally evolved and took its place as the most important institution in the national life working for the perpetuation of a free democracy and the advancement of the public welfare.

For this work of propaganda hundreds of School Societies and Educational Associations were organized; many conventions were held, and many resolutions favoring state schools were adopted; many "Letters" and "Addresses to the Public" were written and published; public-spirited citizens traveled over the country, making addresses to the people explaining the advantages of free state schools; many public-spirited men gave the best years of their lives to the state-school propaganda; and many governors sent communications on the subject to legislatures not yet convinced as to the desirability of state action. At each meeting of the legislatures for years a deluge of resolutions, memorials, and petitions for and against free schools met the members.

The invention of the steam printing press came at about this time, and the first modern newspapers at a cheap price now appeared. These usually espoused progressive measures, and tremendously influenced public sentiment. Those not closely connected with church or private-school interests usually favored public tax-supported schools.

QUESTIONS FOR DISCUSSION

1. Explain why the development of a national consciousness was practically necessary before an educational consciousness could be awakened.
2. Show why it was natural, suffrage conditions considered, that the early interest should have been in advanced education.
3. Why did the Sunday-School movement prove of so much less usefulness in America than in England?
4. Show the analogy between the earlier school societies for educational work and other forms of modern associative effort.
5. Explain the great popularity of the Lancastrian schools over those previously common in America.
6. What were two of the important contributions of the Infant-School idea to American education?
7. Why are schools and education much more needed in a country experiencing a city and manufacturing development than in a country experiencing an agricultural development?
8. Show how the development of cities caused the old forms of education to break down, and made evident the need for a new type of education.
9. Show how each extension of the suffrage necessitates an extension of educational opportunities and advantages.

SELECTED READINGS

In the accompanying *Book of Readings* the following illustrative selections are reproduced:

307. Fowle: The Schools of Boston about 1790–1815.
308. Rhode Island: Petition for Free Schools, 1799.
309. Providence: Rules and Regulations for the Schools in 1820.
310. Providence: A Memorial for Better Schools, 1837.
311. Bourne: Beginnings of Public Education in New York City.
312. Boston Report: Advantages of the Monitorial System.
313. Wightman: Establishment of Primary Schools in Boston.
314. Boston: The Elementary-School System in 1823.
315. Philadelphia: Report of Workingmen's Committee on Schools.

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Boese, Thos. *Public Education in the City of New York.*
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CHAPTER XXVI

THE AMERICAN BATTLE FOR FREE STATE SCHOOLS

THE problem which confronted those interested in establishing state-controlled schools was not exactly the same in any two States, though the battle in many States possessed common elements, and hence was somewhat similar in character. Instead of tracing the struggle in detail in each of the different States, it will be much more profitable for our purposes to pick out the main strategic points in the contest, and then illustrate the conflict for these by describing conditions in one or two States where the controversy was most severe or most typical. The seven strategic points in the struggle for free, tax-supported, non-sectarian, state-controlled schools in the United States were:

1. The battle for tax support.
2. The battle to eliminate the pauper-school idea.
3. The battle to make the schools entirely free.
4. The battle to establish state supervision.
5. The battle to eliminate sectarianism.
6. The battle to extend the system upward.
7. Addition of the state university to crown the system.

We shall consider each of these, briefly, in order.

I. THE BATTLE FOR TAX SUPPORT

Early support and endowment funds. In New England, land endowments, local taxes, direct local appropriations, license taxes, and rate-bills had long been common. Land endowments began early in the New England Colonies, while rate-bills date back to the earliest times and long remained a favorite means of raising money for school support. These means were adopted in the different States after the beginning of our national period, and to them were added a variety of license taxes, while occupational taxes, lotteries, and bank taxes also were employed to raise money for schools. A few examples of these may be cited:

Connecticut, in 1774, turned over all proceeds of liquor licenses to the towns where collected, to be used for schools. New Orleans, in 1826, licensed two theaters on condition that they each pay $3000 annually for the support of schools in the city. New York, in 1799, authorized four state lotteries to raise $100,000 for schools, a similar amount again in 1801, and numerous other lotteries before 1810. New Jersey (**R. 246**) and most of the other States did the same. Congress passed fourteen joint resolutions, between 1812 and 1836, authorizing lotteries to help support the schools of the city of Washington. Bank taxes were a favorite source of income for schools, between about 1825 and 1860, banks being chartered on condition that they would pay over each year for schools a certain sum or percentage of their earnings. These all represent what is known as indirect taxation, and were valuable in accustoming the people to the idea of public schools without appearing to tax them for their support.

The National Land Grants, begun in the case of Ohio in 1802, soon stimulated a new interest in schools. Each State admitted after Ohio also received the sixteenth section for the support of common schools, and two townships of land for the endowment of a state university. The new Western States, following the lead of Ohio (**R. 260**) and Indiana (**R. 261**), dedicated these section lands and funds to free common schools. The sixteen older States, however, did not share in these grants, so most of them now set about building up a permanent school fund of their own, though at first without any very clear idea as to how the income from the fund was to be used.

The beginnings of school taxation. The early idea, which seems for a time to have been generally entertained, that the income from land grants, license fees, and these permanent endowment funds would in time entirely support the necessary schools, was gradually abandoned as it was seen how little in yearly income these funds and lands really produced, and how rapidly the population of the States was increasing. By 1825 it may be said to have been clearly recognized by thinking men that the only safe reliance of a system of state schools lay in the general and direct taxation of all property for their support. "The wealth of the State must educate the children of the State" became a watchword, and the battle for direct, local, county, and state taxation for education was clearly on by 1825 to 1830 in all the Northern States, except the four in New England where the principle of taxation for education had for long been established. Even in these States the struggle to increase taxation and provide better schools called for much argument and popular education (**R. 316**), and occasional backward movements (**Rs. 317, 318**) were encountered.

The struggle to secure the first legislation, weak and ineffective as it seems to us to-day, was often hard and long. "Campaigns of education" had to be prepared for and carried through. Many thought that tax-supported schools would be dangerous for the State, harmful to individual good, and thoroughly undemocratic. Many did not see the need for schools at all. Portions of a town or a city would provide a free school, while other portions would not. Often those in favor of taxation were bitterly assailed, and even at times threatened with personal violence. Often those in favor of improving the schools had to wait patiently for the opposition slowly to wear itself out (R. 319) before any real progress could be made.

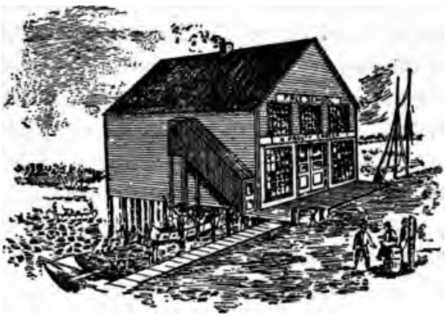


FIG. 90. THE FIRST FREE PUBLIC SCHOOL IN DETROIT

A one-room school, opened in the Second Ward, in 1838. No action was taken in any other ward until 1842.

State support fixed the state system. With the beginnings of state aid in any substantial sums, either from the income from permanent endowment funds, state appropriations, or direct state taxation, the State became, for the first time, in a position to enforce quite definite requirements in many matters. Communities which would not meet the State's requirements would receive no state funds.

One of the first requirements to be thus enforced was that communities or districts receiving state aid must also levy a local tax for schools. Commonly the requirement was a duplication of state aid. The next step in state control was to add still other requirements, as a prerequisite to receiving state aid. One of the first of such was that a certain length of school term, commonly three months, must be provided in each school district. Another was the provision of free heat, and later on free schoolbooks and supplies.

When the duplication-of-state-aid-received stage had been reached, compulsory local taxation for education had been established, and the great central battle for the creation of a state school system had been won. The right to tax for support, and to compel local taxation, was the key to the whole state system of education. From this point on the process of evolving an adequate system of school support in any State has been merely the further education of public opinion to see new educational needs.

II. THE BATTLE TO ELIMINATE THE PAUPER-SCHOOL IDEA

The pauper-school idea. The pauper-school idea was a direct inheritance from England, and its home in America was in the old Central and Southern Colonies, where the old Anglican Church had been in control. New Jersey, Pennsylvania, Delaware, Maryland, Virginia, and Georgia were the chief representatives, though the idea had friends among certain classes of the population in other of the older States. The new and democratic West would not tolerate it. The pauper-school conception was a direct inheritance from English rule, belonged to a society based on classes, and was wholly out of place in a Republic founded on the doctrine that "all men are created equal, and endowed by their Creator with certain unalienable rights." Still more, it was a very dangerous conception of education for a democratic form of government to tolerate or to foster. Its friends were found among the old aristocratic or conservative classes, the heavy taxpayers, the supporters of church schools, and the proprietors of private schools. Citizens who had caught the spirit of the new Republic, public men of large vision, intelligent workingmen, and men of the New England type of thinking were opposed on principle to a plan which drew such invidious distinctions between the future citizens of the State. To educate part of the children in church or private pay schools, they said, and to segregate those too poor to pay tuition and educate them at public expense in pauper schools, often with the brand of pauper made very evident to them, was certain to create classes in society which in time would prove a serious danger to our democratic institutions.

The battle for the elimination of the pauper-school idea was fought out in the North in the States of Pennsylvania and New Jersey, and the struggle in these two States we shall now briefly describe.

The Pennsylvania legislation. In Pennsylvania we find the pauper-school idea fully developed. The constitution of 1790 (**R. 259**) had provided for a state system of pauper schools, but nothing was done to carry even this constitutional direction *into effect until 1802.* A pauper-school law was then enacted, directing the overseers of the poor to notify such parents as they deemed sufficiently indigent that, if they would declare themselves to be paupers, their children might be sent to some specified private or pay school and be given free education (R. 315). The expense for this was assessed against the education poor-fund, which was levied and collected in the same manner as were road taxes or taxes for poor relief. No provision was made for the establishment of public schools, even for the children of the poor, nor was any standard set for the education to be provided in the schools to which they were sent. No other general provision for elementary education was made in the State until 1834.

With the growth of the cities, and the rise of their special problems, something more than this very inadequate provision for schooling became necessary. "The Philadelphia Society for the Establishment and Support of Charity Schools" had long been urging a better system, and in 1814 "The Society for the Promotion of a Rational System of Education" was organized in Philadelphia for the purpose of educational propaganda. Bills were prepared and pushed, and in 1818 Philadelphia was permitted, by special law, to organize as "the first school district" in the State of Pennsylvania, and to provide, with its own funds, a system of Lancastrian schools for the education of the children of its poor.

The Law of 1834. In 1827 "The Pennsylvania Society for the Promotion of Public Schools" began an educational propaganda, which did much to bring about the Free-School Act of 1834. Memorials were presented to the legislature year after year, governors were interested, "Addresses to the Public" were prepared, and a vigorous propaganda was kept up until the Free-School Law of 1834 was the result.

This law, though, was optional. It created every ward, township, and borough in the State a school district, a total of 987 being created for the State. Each school district was ordered to vote that autumn on the acceptance or rejection of the law. Those accepting the law were to organize under its provisions, while those rejecting the law were to continue under the educational provisions of the old Pauper-School Act.

In the school elections of 1834, of a total of 987 districts created, 502, in 46 of the then 52 counties (Philadelphia County not voting), or 52 per cent of the whole number, voted to accept the new law and organize under it; 264 districts, in 31 counties, or 27 per cent of the whole, voted definitely to reject the law; and 221 districts, in 46 counties, or 21 per cent of the whole, refused to take any action either way. In 3 counties every district accepted the law, and in 5 counties every district rejected or refused to act on the law. It was the predominantly German counties, located in the east-central portion of the State, which were strongest in their opposition to the new law. One reason for this was that the new law provided for English schools; another was the objection of the thrifty Germans to taxation; and another was the fear that the new state schools might injure their German parochial schools.

The real fight for free *versus* pauper schools, though, was yet to come. Legislators who had voted for the law were bitterly assailed, and, though it was but an optional law, the question of its repeal and the reinstatement of the old Pauper-School Law became the burning issue of the campaign in the autumn of 1834. Many legislators who had favored the law were defeated for reelection. Others, seeing defeat, refused to run. Petitions for the repeal of the law, and remonstrances against its repeal, flooded the legislature when it met. The Senate at once repealed the law, but the House, largely under the leadership of a Vermonter by the name of Thaddeus Stevens, refused to reconsider, and finally forced the Senate to accept an amended and a still stronger bill. This defeat finally settled, in principle at least, the pauper-school question in Pennsylvania, though it was not until 1873 that the last district in the State accepted the new system.

Eliminating the pauper-school idea in New Jersey. No constitutional mention of education was made in New Jersey until 1844, and no educational legislation was passed until 1816. In that year a permanent state school fund was begun, and in 1820 the first permission to levy taxes "for the education of such poor children as are paupers" was granted. In 1828 an extensive investigation showed that one third of the children of the State were without educational opportunities, and as a result of this investigation the first general school law for the State was enacted, in 1829. This provided for district schools, school trustees and visitation, licensed teachers, local taxation, and made a state appropriation of $20,000 a year to help establish the system. The next year, however, this law was repealed and the old pauper-school plan reëstablished, largely due to the pressure of church and private-school interests. In 1830 and 1831 the state appropriation was made divisible among private and parochial schools, as well as the public pauper schools, and the use of all public money was limited "to the education of the children of the poor."

Between 1828 and 1838 a number of conventions of friends of free public schools were held in the State, and much work in the nature of propaganda was done. At a convention in 1838 a committee was appointed to prepare an "Address to the People of New Jersey" on the educational needs of the State (**R. 320**), and speakers were sent over the State to talk to the people on the subject. The campaign against the pauper school had just been fought to a conclusion in Pennsylvania, and the result of the appeal in New Jersey was such a popular manifestation in favor of free schools that the legislature of 1838 instituted a partial state school system. The pauper-school laws were repealed, and the best features of the short-lived Law of 1829 were reënacted. In 1844 a new state constitution limited the income of the permanent state school fund exclusively to the support of public schools.

With the pauper-school idea eliminated from Pennsylvania and New Jersey, the North was through with it. The wisdom of its elimination soon became evident, and we hear little more of it among Northern people. The democratic West never tolerated it. It continued some time longer in Maryland, Virginia, and Georgia, and at places for a time in other Southern States, but finally disappeared in the South as well in the educational reorganizations which took place following the close of the Civil War.

III. THE BATTLE TO MAKE THE SCHOOLS ENTIRELY FREE

The schools not yet free. The rate-bill, as we have previously stated, was an old institution, also brought over from England, as the term "rate" signifies. It was a charge levied upon the parent to supplement the school revenues and prolong the school term, and was assessed in proportion to the number of children sent by each parent to the school. In some States, as for example Massachusetts and Connecticut, its use went back to colonial times; in others it was added as the cost for education increased, and it was seen that the income from permanent funds and authorized taxation was not sufficient to maintain the school the necessary length of time. The deficiency in revenue was charged against the parents sending children to school, *pro rata*, and collected as ordinary tax-bills (**R. 321**). The charge was small, but it was sufficient to keep many poor children away from the schools.

The rising cities, with their new social problems, could not and would not tolerate the rate-bill system, and one by one they secured special laws from legislatures which enabled them to organize a city school system, separate from city-council control, and under a local "board of education." One of the provisions of these special laws nearly always was the right to levy a city tax for schools sufficient to provide free education for the children of the city.

The fight against the rate-bill in New York. The attempt to abolish the rate-bill and make the schools wholly free was most vigorously contested in New York State, and the contest there is most easily described. While the wealthy districts were securing special legislation and taxing themselves to provide free schools for their children, the poorer and less populous districts were left to struggle to maintain their schools the four months each year necessary to secure state aid. Finally, after much agitation, and a number of appeals to the legislature to assume the rate-bill charges in the form of general state taxation, and thus make the schools entirely free, the legislature, in 1849, referred the matter back to the people to be voted on at the elections that autumn. The legislature was to be thus advised by the people as to what action it should take. The result was a state-wide campaign for free, public, tax-supported schools, as against partially free, rate-bill schools.

The result of the 1849 election was a vote of 249,872 in favor of making "the property of the State educate the children of the State," and 91,952 against it. This only seemed to stir the opponents of free schools to renewed action, and they induced the next legislature to resubmit the question for another vote, in 1850. The opponents of tax-supported schools now mustered their full strength, doubling their vote in 1849, while the majority for free schools was materially cut down.

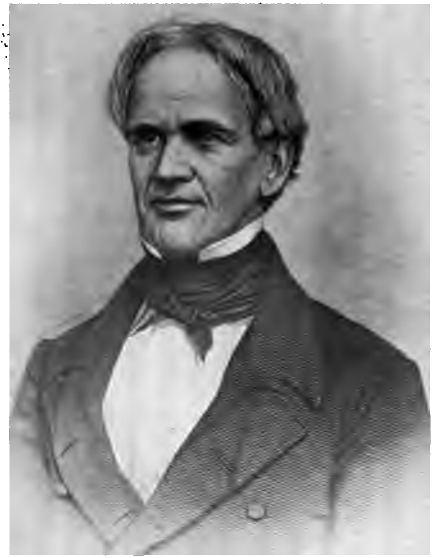
The rate-bill in other States. These two referenda virtually settled the question in New York, though for a time a compromise was adopted. The state appropriation for schools was very materially increased, the rate-bill was retained, and the organization of "union districts" to provide free schools by local taxation where people desired them was authorized. Many of these "*union free districts*" now arose in the more progressive communities of the State, and finally, in 1867, after rural and other forms of opposition had largely subsided, and after almost all the older States had abandoned the plan, the New York legislature finally abolished the rate-bill and made the schools entirely free. The New York fight of 1849 and 1850 was the pivotal fight; in the other States it was abandoned by legislative act, and without a serious contest. In the Southern States free education came with the educational reorganizations following the close of the Civil War.

IV. THE BATTLE TO ESTABLISH SCHOOL SUPERVISION

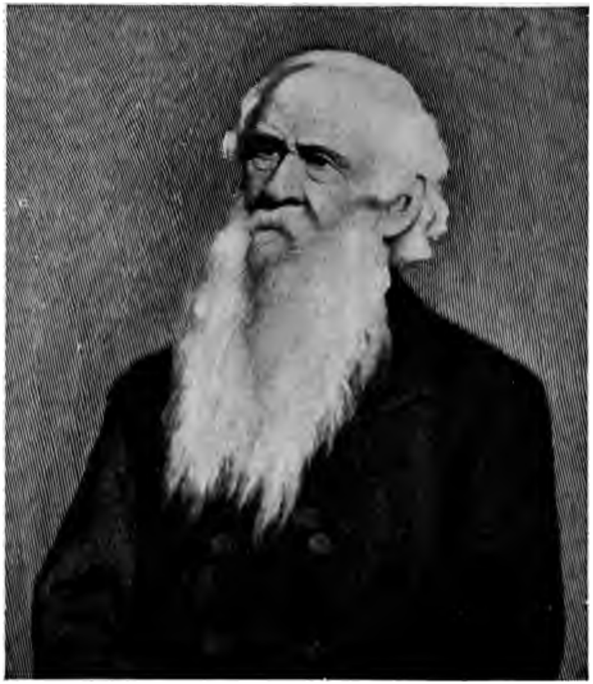
Beginnings of state control. The great battle for state schools was not only for taxation to stimulate their development where none existed, but was also indirectly a battle for some form of state control of the local systems which had already grown up.

State oversight and control, however, does not exercise itself, and it soon became evident that the States must elect or appoint some officer to represent the State and enforce the observance of its demands. It would be primarily his duty to see that the laws relating to schools were carried out, that statistics as to existing conditions were collected and printed, and that communities were properly advised as to their duties and the legislature as to the needs of the State. We find now the creation of a series of school officers to represent the State, the enactment of new laws extending control, and a struggle to integrate, subordinate, and reduce to some semblance of a state school system the hundreds of little community school systems which had grown up.

The first state school officers. The first American State to create a state officer to exercise supervision over its schools was New York, in 1812. In enacting the new law providing for state aid for schools the first State Superintendent of Common Schools in the United States was created. So far as is known this was a distinctively American creation, uninfluenced by the practice in any other land. It was to be the duty of this officer to look after the establishment and maintenance of the schools throughout the State. Maryland created the office in 1826, but two years later abolished it and did not re-create it until 1864. Illinois directed its Secretary of State to act, *ex officio*, as Superintendent of Schools in 1825, as did also Vermont in 1827, Louisiana in 1833, Pennsylvania in 1834, and Tennessee in 1835. Illinois did not create a real State Superintendent of Schools, though, until 1854.



Horace Mann (1796–1859)
(From a painting at the Westfield, Massachusetts, Normal School)



Henry Barnard (1811–1900)
(From a picture taken about 1890)

Plate 5. Two Leaders in the Educational Awakening in the United States

Vermont until 1845, Louisiana until 1847, Pennsylvania until 1857, or Tennessee until 1867. The first States to create separate school officials who have been continued to the present time were Michigan and Kentucky, both in 1837. Often quite a legislative struggle took place to secure the establishment of the office, and later on to prevent its abolition.

By 1850 there were *ex-officio* state school officers in nine and regular school officers in seven of the then thirty-one States, and by 1861 there were *ex-officio* officers in nine and regular officers in nineteen of the then thirty-four States, as well as one of each in two of the organized Territories. Ten of the thirty-four States had, by 1861, also created the office of County Superintendent of Schools. Twenty-five cities also had, by 1861, created the office of City Superintendent of Schools. Only three more cities — Albany, Washington, and Kansas City — were added before 1870, making a total of twenty-eight, but since that date the number of city superintendents has increased to something like fourteen hundred to-day.

The first State Board of Education. Another important form for state control which was created a little later was the State Board of Education, with an appointed Secretary, who exercised about the same functions as a State Superintendent of Schools. This form of organization first arose in Massachusetts, in 1837, in an effort to subordinate the district schools and reduce them to a semblance of an organized system. Instead of following the usual American practice of the time, and providing for an elected State School Superintendent, Massachusetts provided for a small appointed State Board of Education which in turn was to select a Secretary, who was to act in the capacity of a state school officer and report to the Board, and through it to the legislature and the people. Neither the Board nor the Secretary were given any powers of compulsion, their work being to investigate conditions, report facts, expose defects, and make recommendations as to action to the legislature. The permanence and influence of the Board thus depended very largely on the character of the Secretary it selected.

Horace Mann the first Secretary. A prominent Brown University graduate and lawyer in the State Senate, by the name of Horace Mann (1796–1859), who as president of the Senate had been of much assistance in securing passage of the bill creating the *State Board of* Education, was finally induced by the Governor and the Board to accept the position of Secretary. Mr. Mann now began a most memorable work of educating public opinion, and soon became the acknowledged leader in school organization in the United States. State after State called upon him for advice and counsel, while his twelve annual *Reports* to the State Board of Education will always remain memorable documents. Public men of all classes — lawyers, clergymen, college professors, literary men, teachers — were laid under tribute and sent forth over the State explaining to the people the need for a reawakening of educational interest in Massachusetts. Every year Mr. Mann organized a "campaign," to explain to the people the meaning and importance of general education. So successful was he, and so ripe was the time for such a movement, that he not only started a great common school revival in Massachusetts which led to the regeneration of the schools there, but one which was felt and which influenced development in every Northern State.

His twelve carefully written *Reports* on the condition of education in Massachusetts and elsewhere, with his intelligent discussion of the aims and purposes of public education, occupy a commanding place in the history of American education, while he will always be regarded as perhaps the greatest of the "founders" of our American system of free public schools. No one did more than he to establish in the minds of the American people the conception that education should be universal, non-sectarian, and free, and that its aim should be social efficiency, civic virtue, and character, rather than mere learning or the advancement of sectarian ends. Under his practical leadership an unorganized and heterogeneous series of community school systems was reduced to organization and welded together into a state school system, and the people of Massachusetts were effectively recalled to their ancient belief in and duty toward the education of the people.

Henry Barnard in Connecticut and Rhode Island. Almost equally important, though of a somewhat different character, was the work of Henry Barnard (1811–1900) in Connecticut and Rhode Island. A graduate of Yale, and also educated for the law, he turned aside to teach and became deeply interested in education. The years 1835–37 he spent in Europe studying schools, particularly the work of Pestalozzi's disciples. On his return to America he was elected a member of the Connecticut legislature, and at once formulated and secured passage of the Connecticut law (1839) providing for a State Board of Commissioners for Common Schools, with a Secretary, after the Massachusetts plan. Mr. Barnard was then elected as its first Secretary, and reluctantly gave up the law and accepted the position at the munificent salary of $3 a day and expenses. Until the legislature abolished both the Board and the position, in 1842, he rendered for Connecticut a service scarcely less important than the better-known reforms which Horace Mann was at that time carrying on in Massachusetts.

In 1843 he was called to Rhode Island to examine and report upon the existing schools, and from 1845 to 1849 acted as State Commissioner of Public Schools there, where he rendered a service similar to that previously rendered in Connecticut. In addition he organized a series of town libraries throughout the State. For his teachers' institutes he devised a traveling model school, to give demonstration lessons in the art of teaching. From 1851 to 1855 he was again in Connecticut, as principal of the newly established state normal school and *ex-officio* Secretary of the Connecticut State Board of Education. He now rewrote the school laws, increased taxation for schools, checked the power of the districts, there known as "school societies," and laid the foundations of a state system of schools. The work of Mann and Barnard had its influence throughout all the Northern States, and encouraged the friends of education everywhere. Almost contemporaneous with them were leaders in other States who helped fight through the battles of state establishment and state organization and control, and the period of their labors has since been termed the period of the "great awakening."

V. THE BATTLE TO ELIMINATE SECTARIANISM

The secularization of American education. The Church, it will be remembered, was from the earliest colonial times in possession of the education of the young. Not only were the earliest schools controlled by the Church and dominated by the religious motive, but the right of the Church to dictate the teaching in the schools was clearly recognized by the State. Still more, the State looked to the Church to provide the necessary education, and assisted it in doing so by donations of land and money. The minister, as a town official, naturally examined the teachers and the instruction in the schools. After the establishment of the National Government this relationship for a time continued. New York *and the New England* States specifically set aside lands to help both church and school. After about 1800 these land endowments for religion ceased, but grants of state aid for religious schools continued for nearly a half-century longer. Then it became common for a town or city to build a schoolhouse from city taxation, and let it out rent-free to any responsible person who would conduct a tuition school in it, with a few free places for selected poor children. Still later, with the rise of the state schools, it became quite common to take over church and private schools and aid them on the same basis as the new state schools.

In colonial times, too, and for some decades into our national period, the warmest advocates of the establishment of schools were those who had in view the needs of the Church. Then gradually the emphasis shifted to the needs of the State, and a new class of advocates of public education now arose. This change is known as the secularization of American education. It also required many a bitter struggle, and was accomplished in the different States but slowly.

The fight in Massachusetts. The educational awakening in Massachusetts, brought on largely by the work of Horace Mann, was to many a rude awakening. Among other things, it revealed that the old school of the Puritans had gradually been replaced by a new and purely American type of school, with instruction adapted to democratic and national rather than religious ends. Mr. Mann stood strongly for such a conception of public education, and being a Unitarian, and the new State Board of Education being almost entirely liberal in religion, an attack was launched against them, and for the first time in our history the cry was raised that "The public schools are Godless schools." Those who believed in the old system of religious instruction, those who bore the Board or its Secretary personal ill-will, and those who desired to break down the Board's authority and stop the development of the public schools, united their forces in this first big attack against secular education. Horace Mann was the first prominent educator in America to meet and answer the religious onslaught.

A violent attack was opened in both the pulpit and the press. It was claimed that the Board was trying to eliminate the Bible from the schools, to abolish correction, and to "make the schools a counterpoise to religious instruction at home and in Sabbath schools." The local right to demand religious instruction was insisted upon.

Mr. Mann felt that a great public issue had been raised which should be answered carefully and fully. In three public statements he answered the criticisms and pointed out the errors in the argument (R. 322). The Bible, he said, was an invaluable book for forming the character of children, and should be read without comment in the schools, but it was not necessary to teach it there. He showed that most of the towns had given up the teaching of the Catechism before the establishment of the Board of Education. He contended that any attempt to decide what creed or doctrine should be taught would mean the ruin of the schools. The attack culminated in the attempts of the religious forces to abolish the State Board of Education, in the legislatures of 1840 and 1841, which failed dismally.

The attempt to divide the school funds. As was stated earlier, in the beginning it was common to aid church schools on the same basis as the state schools, and sometimes, in the beginnings of state aid, the money was distributed among existing schools without at first establishing any public schools. In many Eastern cities church schools at first shared in the public funds.

After the beginning of the forties, when the Roman Catholic influence came in strongly with the increase in Irish immigration to the United States, a new factor was introduced and the problem, which had previously been a Protestant problem, took on a somewhat different aspect in the form of a demand for a division of the school funds. Between 1825 and 1842 the fight was especially severe in New York City. In 1825 the City Council refused to grant public money to any religious Society, and in 1840 the Catholics carried the matter to the State Legislature.

The legislature deferred action until 1842, and then did the unexpected thing. The heated discussion of the question in the city and in the legislature had made it evident that, while it might not be desirable to continue to give funds to a privately organized corporation, to divide them among the quarreling and envious religious sects would be much worse. The result was that the legislature created for the city a City Board of Education, to establish real public schools, and stopped the debate on the question of aid to religious schools by enacting that no portion of the school funds was in the future to be given to any school in which "any religious sectarian doctrine or tenet should be taught, inculcated, or practiced." *Thus* the real public-school system of New York *City was evolved* out of this attempt to divide the public funds among the churches. The Public School Society continued for a time, but its work was now done, and, in 1853, it surrendered its buildings and property to the City Board of Education and disbanded.

Other States now faced similar demands, but no demand for a share in or a division of the public-school funds, after 1840, was successful. The demand everywhere met with intense opposition, and with the coming of enormous numbers of Irish Catholics after 1846, and German Lutherans after 1848, the question of the preservation of the schools just established as unified state school systems now became a burning one. Petitions for a division of the funds deluged the legislatures (**R.** **323**), and these were met by counter-petitions (**R.** **324**). Mass meetings on both sides of the question were held. Candidates for office were forced to declare themselves. Anti-Catholic riots occurred in a number of cities. The Native-American Party was formed, in 1841, "to prevent the union of Church and State," and to "keep the Bible in the schools." In 1841 the Whig Party, in New York, inserted a plank in its platform against sectarian schools. In 1855 the national council of the Know-Nothing Party, meeting in Philadelphia, in its platform favored public schools and the use of the Bible therein, but opposed sectarian schools. This party carried the elections that year in Massachusetts, New Hampshire, Connecticut, Rhode Island, Maryland, and Kentucky.

To settle the question in a final manner legislatures now began to propose constitutional amendments to the people of their several States which forbade a division or a diversion of the funds, and these were almost uniformly adopted at the first election after being proposed. No State admitted to the Union after 1858, except West Virginia, failed to insert such a provision in its first state constitution.

VI. THE BATTLE TO ESTABLISH THE AMERICAN HIGH SCHOOL

The elementary or common schools which had been established in the different States, by 1850, supplied an elementary or common school education to the children of the masses of the people, and the primary schools which were added after about 1820, carried this education downward to the needs of the beginners. In the rural schools the American school of the 3 Rs provided for all *the children*, from the little ones up, so long as they could advantageously partake of its instruction. Education in advance of this common school training was in semi-private institutions — the academies and colleges — in which a tuition fee was charged. The next struggle came in the attempt to extend the system upward so as to provide to pupils, free of charge, a more complete education than the common schools afforded.

The transition Academy. About the middle of the eighteenth century a tendency manifested itself, in Europe as well as in America, to establish higher schools offering a more practical curriculum than the old Latin schools had provided. In America it became particularly evident, after the coming of nationality, that the old Latin grammar-school type of instruction, with its limited curriculum and exclusively college-preparatory ends, was wholly inadequate for the needs of the youth of the land. The result was the gradual dying out of the Latin school and the evolution of the tuition Academy, previously referred to briefly on page 248.

The academy movement spread rapidly during the first half of the nineteenth century. By 1800 there were 17 academies in Massachusetts, 36 by 1820, and 403 by 1850. The greatest period of their development was from 1820 to 1830, though they continued to dominate secondary education until 1850, and were very prominent until after the Civil War.

One of the main purposes expressed in the endowment or creation of the academies was the establishment of courses which should cover a number of subjects having value aside from mere preparation for college, particularly subjects of a modern nature, useful in preparing youths for the changed conditions of society and government and business. The study of real things rather than words about things, and useful things rather than subjects merely preparatory to college, became prominent features of the new courses of study. Among the most commonly found new subjects were algebra, astronomy, botany, chemistry, general history, United States history, English literature, surveying, intellectual philosophy, declamation, and debating. Being built upon instead of running parallel to the common school course, as the old Latin grammar school had done, the academies clearly mark a transition from the aristocratic and somewhat exclusive college-preparatory Latin grammar school of colonial times to the more democratic high school of to-day. The academies also served a very useful purpose in supplying to the lower schools the best-*educated teachers* of the time.

The demand for higher schools. The different movements tending toward the building-up of free public-school systems in the cities and States, which we have described in this and the preceding chapter, and which became clearly defined in the Northern States after 1825, came just at the time when the Academy had reached its maximum development. The settlement of the question of general taxation for education, the elimination of the rate-bill by the cities and later by the States, the establishment of the American common school as the result of a long native evolution, and the complete establishment of public control over the entire elementary-school system, all tended to bring the semi-private tuition academy into question. Many asked why not extend the public-school system upward to provide the necessary higher education for all in one common state-supported school.

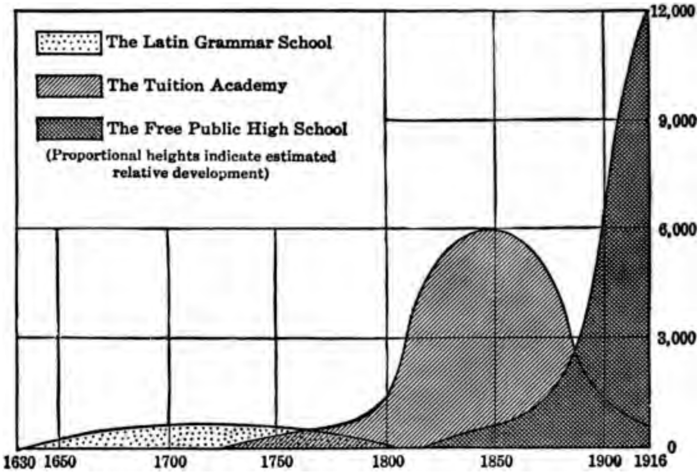


FIG. 91. THE DEVELOPMENT OF SECONDARY SCHOOLS IN THE UNITED STATES

The transitional character of the Academy is well shown in this diagram.

The demand for an upward extension of the public school, which would provide academy instruction for the poor as well as the rich, and in one common public higher school, now made itself felt. As the colonial Latin grammar school had represented the educational needs of a society based on classes, and the academies had represented a transition period and marked the growth of a middle class, so the rising democracy of the second quarter of the nineteenth century now demanded and obtained the democratic high school, supported by the public and equally open to all, to meet the educational needs of a new society built on the basis of a new and aggressive democracy. Where, too, the academy had represented in a way a missionary effort — that of a few providing something for the good of the people (**Rs. 319, 325**) — the high school on the other hand represented a coöperative effort on the part of the people to provide something for themselves.

The first American high school. The first high school in the United States was established in Boston, in 1821 (**R. 326**). For three years it was known as the "English Classical School" (**R. 327**), but in 1824 the school appears in the records as the "English High School." In 1826 Boston also opened the first high school for girls, but abolished it in 1828, due to its great popularity, and instead extended the course of study for girls in the elementary schools.

The Massachusetts Law of 1827. Though Portland, Maine, established a high school in 1821, Worcester, Massachusetts, in 1824, and New Bedford, Haverhill, and Salem, Massachusetts, in 1827, copying the Boston idea, the real beginning of the American high school as a distinct institution dates from the Massachusetts Law of 1827 (**R. 328**), enacted through the influence of James G. Carter. This law formed the basis of all subsequent legislation in Massachusetts, and deeply influenced development in other States.

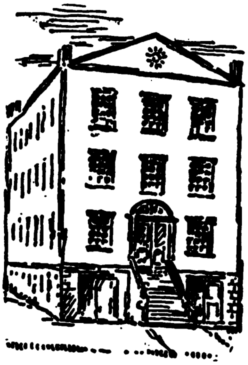


FIG. 92
THE FIRST HIGH SCHOOL IN THE UNITED STATES
Established at Boston in 1821.

This Boston and Massachusetts legislation clearly initiated the public high-school movement in the United States. It was there that the new type of higher school was founded, there that its curriculum was outlined, there that its standards were established, and there that it developed earliest and best.

The struggle to establish and maintain high schools. In many States, legislation providing for the establishment of high schools was attacked in the courts. One of the clearest cases of this came in Michigan, in a test case appealed from the city of Kalamazoo, and commonly known as the Kalamazoo case. The opinion of the *Supreme Court* of the State (**R. 330**) was so favorable and so positive that this decision deeply influenced development in almost all of the Upper Mississippi Valley States.

The struggle to establish and maintain high schools in Massachusetts and New York preceded the development in most other States, because there the common school had been established earlier. In consequence, the struggle to extend and complete the public-school system came there earlier also. The development was likewise more peaceful there, and came more rapidly. In Massachusetts this was in large part a result of the educational awakening started by James G. Carter and Horace Mann. In New York it was due to the early support of Governor De Witt Clinton, and the later encouragement and state aid which came from the Regents of the University of the State of New York. Maine, Vermont, and New Hampshire were like Massachusetts in spirit, and followed closely its example. In Rhode Island and New Jersey, due to old conditions, and in Connecticut, due to the great decline in education there after 1800, the high school developed much more slowly, and it was not until after 1865 that any marked development took place in these States. The democratic West soon adopted the idea, and established high schools as soon as cities developed and the needs of the population warranted. In the South the main high-school development dates from relatively recent times.

Gradually the high school has been accepted as a part of the state common-school system by all the American States, and the funds and taxation originally provided for the common schools have been extended to cover the high school as well. The new States of the West have based their legislation largely on what the Eastern and Central States earlier fought out.

VII. THE STATE UNIVERSITY CROWNS THE SYSTEM

The colonial colleges. The earlier colleges — Harvard, William and Mary, Yale — had been created by the religious-state governments of the earlier colonial period, and continued to retain some state connections for a time after the coming of nationality. As it early became evident that a democracy demands intelligence on the part of its citizens, that the leaders of democracy are not likely to be too highly educated, and that the character of collegiate instruction must ultimately influence national development, efforts were accordingly made to change the old colleges or create new ones, the final outcome of which was the creation of state universities in all the new and in most of the older States. The evolution of the state university, as the crowning head of the free public school system of the State, represents the last phase which we shall trace of the struggle of democracy to create a system of schools suited to its peculiar needs.

The close of the colonial period found the Colonies possessed of nine colleges. These were all small. For the first fifty years of Harvard's history the attendance at the college seldom exceeded twenty, and the President did all the teaching. The first assistant teacher (tutor) was not appointed until 1699, and the first professor not until 1721, when a professorship of divinity was endowed. By 1800 the instruction was conducted by the President and three professors — divinity, mathematics, and "Oriental languages" — assisted by a few tutors who received only class fees, and the graduating classes seldom exceeded forty. The course was four years in length, and all students studied the same subjects. The first three years were given largely to the so-called "Oriental languages" — Hebrew, Greek, and Latin. In addition, Freshmen studied arithmetic; Sophomores, algebra, geometry, and trigonometry; and Juniors, natural (book) science; and all were given much training in oratory, and some general history was added. The Senior year was given mainly to ethics, philosophy, and Christian evidences. The instruction in the eight other older colleges, before 1800, was not materially different.

Growth of colleges by 1860. Fifteen additional colleges were founded before 1800, and it has been estimated that by that date the two dozen American colleges then existing did not have all told over one hundred professors and instructors, not less than one thousand nor more than two thousand students, or property worth over one million dollars. Their graduating classes were small. No one of the twenty-four admitted women in any way to its privileges. After 1820, with the firmer establishment of the Nation, the awakening of a new national consciousness, the development of larger national wealth, and a court decision (p. 391) which safeguarded the endowments, interest in the founding of new colleges perceptibly quickened, as may be seen from the adjoining table, and between 1820 and 1880 came the great period of denominational effort. The churches now made heroic efforts to establish colleges generally, and the denominational college played an important part in the early history of higher education *in the United States.* Up to about 1870 the provision of higher education, as had been the case earlier with the provision of secondary education by the academies, had been left largely to private effort. There were, to be sure, a few state universities before 1870, though usually these were not better than the denominational colleges around them, and often they maintained a non-denominational character only by preserving a proper balance between the different denominations in the employment of their faculties. Speaking generally, higher education in the United States before 1870 was provided very largely in the tuitional colleges of the different religious denominations, rather than by the State. Of the 246 colleges founded by the close of the year 1860, but 17 were state institutions, and but two or three others had any state connections.

Before 1780	10
1780–89	7
1790–99	7
1800–09	9
1810–19	5
1820–29	22
1830–39	38
1840–49	42
1850–59	92
1860–69	73
1870–79	61
1880–89	74
1890–99	54
Total	494

COLLEGES FOUNDED UP TO 1900

(After a table by Dexter, corrected by U.S. Comr. Educ. data. Only approximately correct)

The new national attitude. With the rise of the new democratic spirit after about 1820 there came a demand, felt least in New England and most in the South and the new States in the West, for institutions of higher learning which should represent the State. It was argued that colleges were important instrumentalities for moulding the future, that the kind of education given in them must ultimately influence the welfare of the State, and that higher education cannot be regarded as a private matter. The type of education given in these higher institutions, it was argued, "will appear on the bench, at the bar, in the pulpit, and in the senate, and will unavoidably affect our civil and religious principles." For these reasons, as well as to crown our state school system and to provide higher educational advantages for its leaders, it was argued that the State should exercise control over the colleges.

This new national spirit manifested itself in a number of ways. In New York we see it in the reorganization of King's College, the rechristening of the institution as Columbia, and the placing of it under at least the nominal supervision of the governing educational body of the State. In Pennsylvania an attempt was made to bring the university into closer connection with the

State, but this failed. In New Hampshire the legislature tried, in 1816, to transform Dartmouth College into a state institution. This act was contested in the courts, and the case was finally carried to the Supreme Court of the United States. There it was decided, in 1819, that the charter of a college was a contract, the obligation of which a legislature could not impair.

Effect of the Dartmouth College decision. The effect of this decision manifested itself in two different ways. On the one hand it guaranteed the perpetuity of endowments, and the great period of private and denominational effort (see table, p. 390) now followed. On the other hand, since the States could not change charters and transform old establishments, they began to turn to the creation of new state universities of their own. Virginia created its state university the same year as the Dartmouth case decision. The University of North Carolina, which had been established in 1789, and which began to give instruction in 1795, but which had never been under direct state control, was taken over by the State in 1821. The University of Vermont, originally chartered in 1791, was rechartered as a state university in 1838. The University of Indiana was established in 1820. Alabama provided for a state university in its first constitution, in 1819, and the institution opened for instruction in 1831. Michigan, in framing its first constitution preparatory to entering the Union, in 1835, made careful provisions for the safeguarding of the state university and for establishing it as an integral part of its state school system, as Indiana had done in 1816. Wisconsin provided for the creation of a state university in 1836, and embodied the idea in its first constitution when it entered the Union in 1848, and Missouri provided for a state university in 1839, Mississippi in 1844, Iowa in 1847, and Florida in 1856. The state university is to-day found in every "new" State and in some of the "original" States, and practically every new Western and Southern State followed the patterns set by Indiana, Michigan, and Wisconsin and made careful provision for the establishment and maintenance of a state university in its first state constitution.

There was thus quietly added another new section to the American educational ladder, and the free public-school system was extended farther upward. For a long time small, poorly supported by the States, much like the church colleges about them in character and often inferior in quality, one by one the state universities have freed themselves alike from denominational restrictions on the one hand and political control on the other, and have set about rendering the service to the State which a state university ought to render. Michigan, the first of our state universities to free itself, take its proper place, and set an example for others to follow, opened in 1841 with two professors and six students. In 1844 it was a little institution of three professors, one tutor, one assistant, and one visiting lecturer, had but fifty-three students, and offered but a single course of study, consisting chiefly of Greek, Latin, mathematics, and intellectual and moral science (**R.** 331). As late as 1852 it had but seventy-two students, but by 1860 its remarkable growth as a state university had begun, it enrolled five hundred and nineteen.

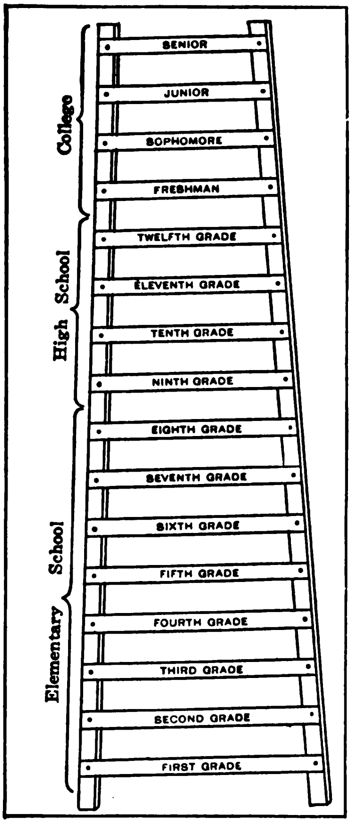


FIG. 93. THE AMERICAN EDUCATIONAL LADDER

Compare this with the figure on page 321, and the democratic nature of the American school system will be apparent.

The American free public-school system now established. By the close of the second quarter of the nineteenth century, certainly by 1860, we find the American public-school system fully established, in principle at least, in all our Northern States (**R. 332**). Much yet remained to be done to carry into full effect what had been established in principle, but everywhere democracy had won its fight, and the American public school, supported by general taxation, freed from the pauper-school taint, free and equally open to all, under the direction of representatives of the people, free from sectarian control, and complete from the primary school through the high school, and in the Western States through the university as well, was established permanently in American public policy. It was a real democratic educational ladder that had been created, and not the typical two-class school system of continental European States. The establishment of the free public high school and the state university represent the crowning achievements of those who struggled to found a state-supported educational system fitted to the needs of great democratic States. Probably no other influences have done more to unify the American people, reconcile diverse points of view, eliminate state jealousies, set ideals for the people, and train leaders for the service of the States and of the Nation than the academies, high schools, and colleges scattered over the land. They have educated but a small percentage of the people, to be sure, but they have trained most of the leaders who have guided the American democracy since its birth.

QUESTIONS FOR DISCUSSION

1. Explain the theory of "vested rights" as applied to private and parochial schools.
2. Does every great advance in provisions for human welfare require a period of education and propaganda? Illustrate.
3. Explain just what is meant by "the wealth of the State must educate the children of the State."
4. Show how the retention of the pauper-school idea would have been dangerous to the life of the Republic.
5. Why were the cities more anxious to escape from the operation of the pauper-school law than were the towns and rural districts?
6. Why were the pauper-school and the rate-bill so hard to eliminate?
7. Explain why, in America, schools naturally developed from the community outward.
8. Show the gradual transition from church control of education, through state aid of church schools, to secularized state schools.
9. Show why secularized state schools were the only possible solution for the United States.
10. Show that secularization would naturally take place in the textbooks and the instruction, before manifesting itself in the laws.
11. Show how the American academy was a natural development in the national life.
12. Show how the American high school was a natural development after the academy.
13. Show why the high school could be opposed by men who had accepted tax-supported elementary schools. Why has such reasoning been abandoned now?
14. Explain the difference, and illustrate from the history of American educational development, between establishing a thing in principle and carrying it into full effect.
15. Show why it was natural that higher education should have been left largely to denominational effort, before 1860.
16. Was the early argument as to the influence of higher education on the State a true argument? Why?
17. What would have been the probable results had the Dartmouth College *case been decided* the other way?

18. Explain why it required so long to get the state universities started on their real development.
19. Show how the opening of collegiate instruction to women was a phase of the new democratic movement.
20. Show how college education has been a unifying force in the national life.

SELECTED READINGS

In the accompanying *Book of Readings* the following illustrative selections are reproduced:

316. Mann: The Ground of the Free-School System.
317. Governor Cleveland: Repeal of the Connecticut School Law.
318. Mann: On the Repeal of the Connecticut School Law.
319. Gulliver: The Struggle for Free Schools in Norwich.
320. Address: The State and Education.
321. Michigan: A Rate-Bill, and a Warrant for Collection.
322. Mann: On Religious Instruction in the Schools.
323. Michigan: Petition for a Division of the School Fund.
324. Michigan: Counter-Petition against a Division.
325. Connecticut: Act of Incorporation of Norwich Free Academy.
326. Boston: Establishment of the First American High School.
327. Boston: The Secondary-School System in 1823.
328. Massachusetts: The High School Law of 1827.
329. Gulliver: An Example of the Opposition to High Schools.
330. Michigan: The Kalamazoo Decision.
331. Michigan: Program of Studies at University, 1843.
332. Tappan: The Michigan State System of Public Instruction.

SUPPLEMENTARY REFERENCES

*Brown, E. E. *The Making of our Middle Schools.*
*Brown, S. W. *The Secularization of American Education.*
Cubberley, E. P. *Public Education in the United States.*
Dexter, E. G. *A History of Education in the United States.*
*Hinsdale, B. A. *Horace Mann, and the Common School Revival in the United States.*
*Inglis, A. J. *The Rise of the High School in Massachusetts.*
Martin, George H. *The Evolution of the Massachusetts Public School System.*
*Mead, A. R. *The Development of Free Schools in the United States, as Illustrated by Connecticut and Michigan.*
Taylor, James M. *Before Vassar Opened.*
*Thwing, Charles F. *A History of Higher Education in America.*

CHAPTER XXVII

EDUCATION BECOMES A NATIONAL TOOL

I. SPREAD OF THE STATE-CONTROL IDEA

The four type nations. We have now traced, in some detail, the struggles of forward-looking men to establish national systems of education in four great world nations. In each we have described the steps by means of which the State gradually superseded the Church in the control of education, and the motives and impulses which finally led the State to take over the school as a function of the State. The steps and impelling motives and rate of transfer were not the same in any two nations, but in each of the five the political necessities of the State in time made the transfer seem desirable. Time everywhere was required to effect the change. The movement began earliest and was concluded earliest in the German States, and was concluded last in England. In the German States and France the change came rapidly and as a result of legislative acts or imperial decrees. In England and the United States the transfer took place, as we have seen, only in response to the slow development of public opinion.

This change in control and extension of educational advantages was essentially a nineteenth-century movement, and a resultant of the new political philosophy and the democratic revolutions of the later eighteenth century, combined with the industrial revolution of the nineteenth century. A new political impulse now replaced the earlier religious motive as the incentive for education, and education for literacy and citizenship became, during the nineteenth century, a new political ideal that has, in time, spread to progressive nations all over the world.

The four great nations whose educational evolution has been described in the preceding chapters may be regarded as having formed types which have since been copied, in more or less detail, by the more progressive nations in different parts of the world. The continental European two-class school system, the American educational ladder, and the English tendency to combine the two and use the best parts of each, have been reproduced in the different national educational systems which have been created by the *various political* governments of the world. The continental

European idea of a centralized ministry for education, with an appointed head or a cabinet minister in control, has also been widely copied. The Prussian two-class plan has been most influential among the Teutonic and Slavic peoples of Europe, and has also deeply influenced educational development among the Japanese; English ideas have been extensively copied in the English self-governing dominions; and the American plan has been clearly influential in Canada, the Argentine, and in China. The French centralized plan for organization and administration has been widely copied in the state educational organizations of the Latin nations of Europe and South America. In a general way it may be stated that the more democratic the government of a nation has become the greater has been the tendency to break away from the two-class school system, to introduce more of an educational ladder, and to bring in more of the English conception of granting to localities a reasonable amount of local liberty in educational affairs.

Spread of the state-control idea among northern nations. The development of schools under the control of the government, and the extension of state supervision to the existing religious schools, took place in the different cantons of Switzerland, and in Holland, Denmark, Norway, and Sweden, somewhat contemporaneously with the development described for the four type nations. The work of Pestalozzi and Fellenberg, and of their disciples and followers, had given an early impetus to the establishment of schools and teacher-training in the Swiss cantons, most being done in the German-speaking portions.

Finland should also be classed with these northern nations in matters of educational development. Lutheran ideas as to religion and the need for education took deep hold there at an early date (p. 158). A knowledge of reading and the Catechism was made necessary for confirmation as early as 1686, and democratic ideas also found an early home among this people. In consequence the Finns have for long been a literate people. The law making elementary education a function of the State, however, dates only from 1866, and secondary education was taken over from the ecclesiastical authorities only in 1872.

Similarly, Scotland, another northern nation, began schools as a phase of its Reformation fervor. During the eighteenth century the parish schools, created by the Acts of 1646 (**R. 179**; p. 178) and 1696, proved insufficient, and voluntary schools were added to supplement them. Together these insured for Scotland a much higher degree of literacy than was the case in England. The final state organization of education in Scotland dates from the Scottish Education Act of 1872.

The map reproduced here, showing the progress of general education by the close of the nineteenth century, as measured by the spread of the ability to read and write, reveals at a glance the high degree of literacy of the northern Teutonic and mixed Teutonic nations. It was among these nations that the Protestant Reformation ideas made the deepest impression; it was in these northern States that the Protestant elementary vernacular school, to teach reading and religion, attained its earliest start; it was there that the school was taken over from the Church and erected into an effective national instrument at an early date; and it was these nations which had been most successful, by the close of the nineteenth century, in extending the elements of education to all *and thus producing* literate populations.

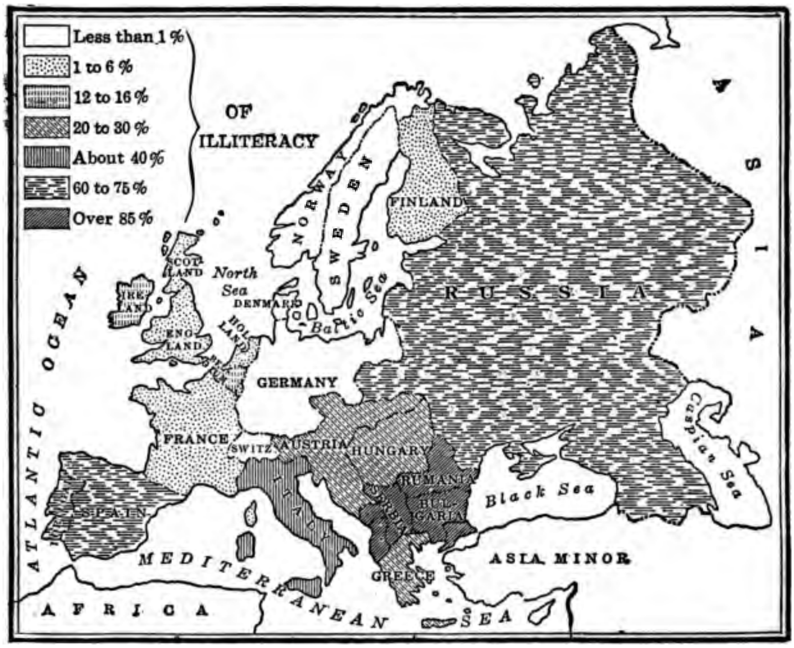


FIG. 94. THE PROGRESS OF LITERACY IN EUROPE BY THE CLOSE OF THE NINETEENTH CENTURY

The state-control idea in the south and east of Europe. As we pass to the south and east of Europe we pass not only to lands which remained loyal to the Roman Church, or are adherents of the Greek Church, and hence did not experience the Reformation fervor with its accompanying zeal for education, but also to lands untouched by the French-Revolution movement and where democratic ideas have only recently begun to make any progress. Greece alone forms an exception to this statement, a constitutional government having been established there in 1843. Removed from the main stream of European civilization, these nations have been influenced less by modern forces; the hold of the Church on the education of the young has there been longest retained; and the taking-over of education by the State has there been longest deferred. In consequence, the schools provided have for long been inadequate both in number and scope, and the progress of literacy and democratic ideas among the people has been slow.

The state-control idea in the English self-governing dominions. The English and French settlers in Ontario, Quebec, and the Maritime Provinces of Canada brought the English and French parochial-school ideas from their home-lands with them, but these home conceptions were materially modified, at an early date, by settlers from the northern States of the American Union. These introduced the New England idea of state control and public responsibility for education. In part copying precedents recently established in the new American States, as an outcome of the struggles there to establish free, tax-supported, and state-controlled schools, both Ontario and Quebec early began the establishment of state systems of education for their people. A superintendent of education was appointed in Ontario in 1844, and the Common School Act of 1846 laid the foundation of the state school system of the Province. In the law of 1871 a system of uniform, free, compulsory, and state-inspected schools was definitely provided for. Quebec, in 1845, made the ecclesiastical parish the unit for school administration; in 1852 appointed government inspectors for the church schools; and in 1859 provided for a Council of Public Instruction to control all schools in the Province. The Dominion Act of 1867 left education, as in the United States, to the several Provinces to control, and state systems of education, though with large liberty in religious instruction, or the incorporation of the religious schools into the state school systems, have since been erected in all the Canadian Provinces. Following American precedents, too, a thoroughly democratic educational ladder has almost everywhere been created, substantially like that shown in the Figure on page 392.

In Australia and New Zealand education has similarly been left to the different States to handle, but a state centralized control has been provided there which is more akin to French practice than to English ideas. In each State, primary education has been made free, compulsory, secular, and state-supported. The laws making such provision in the different States date from 1872, in Victoria; 1875, in Queensland; 1878, in South Australia, West Australia, and New Zealand; and 1880, in New South Wales. Secondary education has not as yet been made free, and many excellent privately endowed or fee-supported secondary schools, after the English plan, are found in the different States.

In the new Union of South Africa all university education has been taken over by the Union, while the existing school systems of the different States are rapidly being taken over and expanded by the state governments, and transformed into constructive instruments of the States.

The state-control idea in the South American States. As we have seen in chapter xx, the spirit of nationality awakened by the French Revolution soon spread to South America, and between 1815 and 1821 all of Spain's South American colonies revolted, declared their independence from the mother country, and set up constitutional republics. Brazil, in 1822, in a similar manner severed its connections from Portugal. The United States, through the Monroe Doctrine (1823), helped these new States to maintain their independence. For approximately half a century these States, isolated as they were and engaged in a long and difficult struggle to evolve stable forms of government, left such education as was provided to private individuals and societies and to the missionaries and teaching orders of the Roman Church. After the middle of the nineteenth century, the new forces stirring in the modern world began to be felt in South America as well, and, after about 1870, a well-defined movement to establish state school systems began to be in evidence.

The Argentine constitution of 1853 had directed the establishment of primary schools by the State, but nothing of importance was done until after the election of Dr. Sarmiento as President, in

1868. Under his influence an American-type normal school was established, teachers were imported from the United States, and liberal appropriations for education were begun. In 1873 a general system of national aid for primary education was established, and in 1884 a new law laid the basis of the present state school system.

In Chili, the constitution of 1833 declared education to be of supreme importance, and a normal school was established in Santiago, as early as 1840. The basic law for the organization of a state system of primary instruction, however, dates from 1860, and the law organizing a state system of secondary and higher education from 1872.

In Peru, an educational reform movement was inaugurated in 1876, but the war with Chili (1879–84) checked all progress. In 1896 an Educational Commission was appointed to visit the United States and Europe, and the law of 1901 marked the creation of a ministry for education and the real beginnings of a state school system.

The Brazilian constitution of 1824 left education to the several States (twenty and one Federal District), and a permissive law of 1827 allowed the different States to establish schools. It was not until 1854, however, that public schools were organized in the Federal District, and these mark the real beginning of state education in Brazil. Since then the establishment of state schools has gradually extended to the coast States, and inland with the building of railway lines and the opening-up of the interior to outside influences. The basis for state-controlled education has now been laid in all the States, but the attendance at the schools as yet is small.

In some of the other South American States, such as Bolivia, Ecuador, and Venezuela, but little progress in extending state-controlled schools has as yet been made, and the training of the young is still left largely to private effort, the Church, and the religious orders. The state-control idea, though, has been definitely established in principle in these countries.

The state-school idea in eastern Asia. In 1854 Admiral Perry effected the treaty of friendship with Japan which virtually opened that nation to the influences of western civilization, and one of the most wonderful transformations of a people recorded in history soon began. In 1867 a new Mikado came to the throne, and in 1868 the small military class, which had ruled the nation for some seven hundred years, gave up their power to the new ruler. A new era in Japan, known as the *Meiji*, dates from this event. In 1871 the centuries-old feudal system was abolished, and all classes in the State were declared equal before the law. This same year the first newspaper in Japan was begun. In 1872 the first educational code for the nation was promulgated by the Mikado. This ordered the general establishment of schools, the compulsory education of the people (**R.** 334 **a**), and the equality of all classes in educational matters. Students were now sent abroad, especially to Germany and the United States; foreign teachers were imported; an American normal-school teacher was placed in charge of the newly opened state normal school; the American class method of instruction was introduced; schoolbooks and teaching apparatus were prepared, after American models; middle schools were organized in the towns; higher schools were opened in the cities; and the old Academy of Foreign Languages was evolved (1877) into the University of Tokyo. In 1884 the study of English was introduced into the courses of the public schools. In 1889 a form of constitution was granted to the people, and a parliament established.

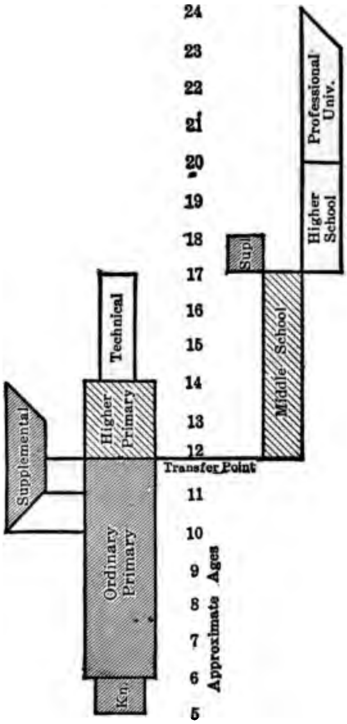


FIG. 95. THE JAPANESE TWO-CLASS SCHOOL SYSTEM

Adapting the continental European idea of a two-class school system to the peculiar needs of the nation, the Japanese have worked out, during the past half-century, a type of state-controlled school system which has been well adapted to their national needs. Instruction in national morality, based on the ancestral virtues, brotherly affection, and loyalty to the constitution and the ruling class (**R.** 334 **b-c**), has been well worked out in their schools. Though the government has remained largely autocratic in form, the Japanese have, however, retained throughout all their educational development the fundamental democratic principle enunciated in the Preamble to the Educational Code of 1872 (**R.** 334 a), *viz.*, that every one without distinction of class or sex shall receive primary education at least, and that the opportunity for higher education shall be open to all children. So completely has the education of the people been conceived of as one of the most important functions of the State that all education has been placed under a centralized state control, with a Cabinet Minister in charge of all administrative matters connected with the education of the nation.

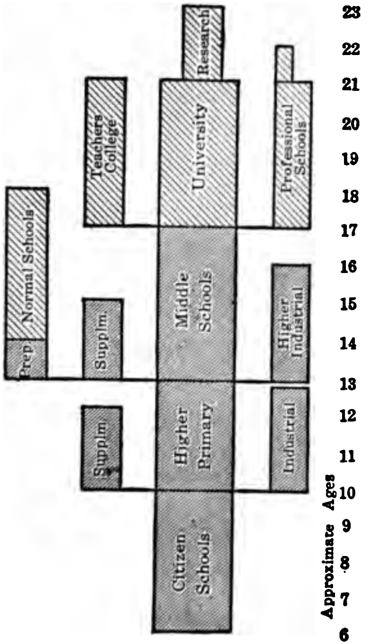


FIG. 96. THE CHINESE EDUCATIONAL LADDER

Since near the end of the nineteenth century what promises to be an even more wonderful transformation of a people—political, social, scientific, and industrial—has been taking place in China (**R.** 335). A much more democratic type of national school system than that of the Japanese has been worked out, and this the new (1912) Republic of China is rapidly extending in the provinces, and making education a very important function of the new democratic national life. In the beginning, when displacing the centuries-old Confucian educational system, the Chinese adopted Japanese ideas and organized their schools (1905) somewhat after the Japanese model. Later on, responding to the influence of many American-educated Chinese and to the more democratic impulses of the Chinese people, the new government established by the Republic of 1912 changed the school system at first established so as to make it in type more like the American educational ladder. The new Chinese school system is shown in the drawing on this page. The university instruction is modern and excellent, and the addition of the cultural and scientific knowledge worked out in western Europe to the intellectual qualities of this capable people can hardly fail to result, in time, in the production of a wonderful modern nation, probably in one of the greatest nations of the mid-twentieth century.

In 1891 the independent Kingdom of Siam, awakened from its age-long isolation by new world influences, sent a prince to Europe to study and report on the state systems of education maintained there. As a result of his report a department of public education was created, which later evolved into a ministry of public instruction, and elementary schools were opened by the State in the thirteen thousand old Buddhist temples. Since this beginning, higher schools of law, medicine, agriculture, engineering, and military science have been added, taught largely by imported English and American teachers. In consequence of the new educational organization, and the new influences brought in, the whole life of this little kingdom has been transformed during the past three decades.

General acceptance of the state-function conception. The different national school systems, the creation of which has so far been briefly described, are typical and represent a great world movement which characterized the latter half of the nineteenth century. This movement is still under way, and increasing in strength. Other state school organizations might be added to the list, but those so far given are sufficient. Beginning with the nations which were earliest to the front of the onward march of civilization, the movement for the state control of education, itself an expression of new world forces and new national needs, has in a century spread to every continent on the globe. To-day progressive nations everywhere conceive of education for their people as so closely associated with their social, political, and industrial progress, and their national welfare and prosperity (**R. 336**), that the control of education has come to be regarded as an indispensable function of the State. State constitutions (**R. 333**) have accordingly required the creation of comprehensive state school systems; legislators have turned to education with a new interest; bulky state school codes have given force to constitutional mandates; national literacy has become a goal; the diffusion of political intelligence by means of the school has naturally followed the extension of the suffrage; while the many new forces and impulses of a modern world have served to make the old religious type of education utterly inadequate, and to call for national action to a degree never conceived of in the days when religious, private, and *voluntary educational* effort sufficed to meet the needs of the few who felt the call to learn. What a few of the more important of these new nineteenth-century forces have been, which have so fundamentally modified the character and direction of education, it may be worth while to set forth briefly, before proceeding further.

II. NEW MODIFYING FORCES

The advance of scientific knowledge. The first and most important of these nineteenth-century forces, and the one which preceded and conditioned all the others, was the great increase of accurate knowledge as to the forces and laws of the physical world, arising from the application of scientific method to the investigation of the phenomena of the material world (**R. 337**). During the nineteenth century the intellect of man was stimulated to activity as it had not been before since the days when little Athens was the intellectual center of the world. What the Revival of Learning was to the classical scholars of the fifteenth and sixteenth centuries, the movement for scientific knowledge and its application to human affairs was to the nineteenth. It changed the outlook of man on the problems of life, vastly enlarged the intellectual horizon, and gave a new trend to education and to scholarly effort. What the scholars of the seventeenth and eighteenth centuries had been slowly gathering together as interesting and classified phenomena, the scientific scholars of the nineteenth century organized, interpreted, expanded, and applied.

In the domain of the physical sciences very important advances characterized the century. Chemistry, up to the end of the first quarter of the nineteenth century largely a collection of unrelated facts, was transformed by the labors of such men as Dalton (1766–1844), Faraday (1791–1867), and Liebig into a wonderfully well-organized and vastly important science. Physics has experienced an equally important development. It, too, at the beginning of the nineteenth century was in the preliminary state of collecting, coördinating, and trying to interpret data. In a century physics has, by experimentation and the application of mathematics to its problems, been organized into a number of exceedingly important sciences. What at the beginning of the nineteenth century was a small textbook study of natural philosophy has since been subdivided into the two great sciences of physics and chemistry, and these in turn into numerous well-organized branches.

In 1830 Charles Lyell applied law to the history of the earth in his *Principles of Geology*, and in 1859 Charles Darwin published the results of thirty years of careful biological research in his *Origin of Species*. The former overthrew the earlier theory of earthly "catastrophes," while the latter swept away the old theory of special and individual creation which had been cherished since early antiquity, and substituted in its place the reign of law in the field of biological life. These substituted the principle of orderly evolution for the old theory of special creation, marked forward steps in human thinking, and gave an entirely new direction to the study of world development and natural history.

In 1856 the German Virchow (1821–1902) made his far-reaching contribution of cellular pathology to medical science; between 1859 and 1865 the French scientist Pasteur (1822–95) established the germ theory of fermentation, putrefaction, and disease; about the same time the English surgeon Lister (1827–1914) began to use antiseptics in surgery; and, in 1879, the bacillus of typhoid fever was found. Out of this work the modern sciences of pathology, aseptic surgery, bacteriology, and immunity were created, and the cause and mode of transmission of the great diseases which once decimated armies and cities — plague, cholera, malaria, typhoid, typhus, yellow fever, dysentery — as well as the scourges of tuberculosis, diphtheria, and lockjaw, have been determined. The importance of these discoveries for the future welfare and happiness of mankind can scarcely be overestimated. Sanitary science arose as an application of these discoveries, and since about 1875 a sanitary and hygienic revolution has taken place.

The above represent but a few of the more important of the many great scientific advances of the nineteenth century. What the thinkers of the eighteenth century had sowed broadcast through a general interest in science, their successors in the nineteenth reaped as an abundant harvest. The fruitfulness of the Baconian method (p. 210) in the hands of his successors far surpassed his most sanguine expectations.

The applications of science and the result. All this work, as has been frequently pointed out (**R. 338**), had of necessity to precede the applications of science to the arts and to the advancement of the comforts and happiness of mankind. The new studies soon caught the attention of younger scholars; special schools for their study began to be established by the middle of the nineteenth century; enthusiastic students of science began forcefully to challenge the centuries-long supremacy of classical studies; funds for scientific research began to be provided; the printing-press disseminated the new ideas; and thousands of applications of science to trade and industry and human welfare began to attract public attention and create a new demand for schools and for a new extension of learning. During the past century the applications of this new learning to matters that intimately touch the life of man have been so numerous and so far-reaching in their effects that they have produced a revolution in life conditions unlike anything the world ever experienced before. In all the days from the time of the Crusades to the end of the Napoleonic Wars the changes in living effected were less, both in scope and importance, than have taken place in the century since Napoleon was sent to Saint Helena.

This transformation we call the Industrial Revolution. Since the middle of the nineteenth century, with the very rapid development of factories, the building of railroads, and the extension of steamship lines, even the most remote countries have been affected by the new forces. Nations long primitive and secluded have been modernized and industrialized; century-old trades and skills have been destroyed by machinery; the old home and village industries have been replaced by the factory system; cities for manufacturing and trade have everywhere experienced a rapid development; and even on the farm the agricultural methods of bygone days have been replaced by the discoveries of science and the products of invention. Almost nothing is done to-day as it was a century ago, and only in remote places do people live as they used to live.

Living conditions a century ago. A century ago people everywhere lived comparatively simple lives. The steam engine, while beginning to be put to use (p. 266), had not as yet been extensively applied and made the willing and obedient slave of man. The lightning had not as yet been harnessed, and the now omnipresent electric motor was then still unknown. Only in England had manufacturing reached any large proportions, and even there the methods were somewhat primitive. Thousands of processes which we now perform simply and effectively by the use of steam or electric power, a century ago were done slowly and painfully by human labor. The chief sources of power were then man and horse power. The home was a center in which most of the arts and trades were practiced, and in the long winter evenings the old crafts and skills were turned to commercial account. What every family used and wore was largely made in the home, the village, or the neighborhood.

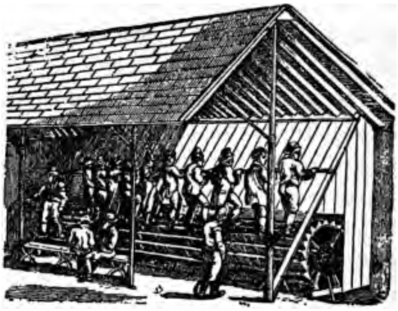


FIG. 97. MAN POWER BEFORE THE DAYS OF STEAM

Foot power a century ago. (From a cut by Anderson, America's first important engraver)

Change in living conditions to-day. In a century all has been changed. Steam and electricity and sanitary science have transformed the world; the railway, steamship, telegraph, cable, and printing-press have made the world one. The output of the factory system has transformed living and labor conditions, even to the remote corners of the world; sanitary science and sanitary legislation have changed the primitive conditions of the home and made of it a clean and comfortable modern abode; men and women have been freed from an almost incalculable amount of drudgery and toil, and the human effort and time saved may now be devoted to other types of work or to enjoyment and learning. Thousands who once were needed for menial toil on farm or in shop and home are now freed for employment in satisfying new wants and new pleasures that mankind has come to know, or may devote their time and energies to forms of service that advance the welfare of mankind or minister to the needs of the human spirit.

Despite certain unfortunate results following the change from age-old working conditions, the century of transition has seen the laboring man making gains unknown before in history, and the peasant has seen the abolition of serfdom and feudal dues. Homes have gained tremendously. The drudgery and wasteful toil have been greatly mitigated. To-day there is a standard of comfort and sanitation, even for those in the humblest circumstances, beyond all previous conceptions. The poorest workman to-day can enjoy in his home lighting undreamed of in the days of tallow candles; warmth beyond the power of the old smoky soft-coal grate; food of a variety and quality his ancestors never knew;

kitchen conveniences and an ease in kitchen work wholly unknown until recently; and sanitary conveniences and conditions beyond the reach of the wealthiest half a century ago. The caste system in industry has been broken down, and men and their children may now choose their occupations freely, and move about at will. Wages have greatly increased, both actually and relatively to the greatly improved standard of living. The work of women and children is easier, and all work for shorter hours. Child labor is fast being eliminated in all progressive nations. In consequence of all these changes for the better, people to-day have a leisure for reading and thinking and personal enjoyment entirely unknown before the middle of the nineteenth century, and governments everywhere have found it both desirable and necessary to provide means for the utilization of this leisure and the gratification of the new desires. Along with these changes has gone the development of the greatest single agent for spreading liberalizing ideas — the modern newspaper — "the most inveterate enemy of absolutism and reaction." Despite censorships, suppressions, and confiscations, the press has by now established its freedom in all enlightened lands, and the cylinder press, the telegraph, and the cable have become "indispensable adjuncts to the development of that power which every absolutist has come to dread, and with which every prime minister must daily reckon."

III. EFFECT OF THESE CHANGES ON EDUCATION

General result of these changes. The general result of the vast and far-reaching changes which we have just described is that the intellectual and political horizon of the working classes has been tremendously broadened; the home has been completely altered; children now have much leisure and do little labor; and the common man at last is rapidly coming into his own. Still more, the common man seems destined to be the dominant force in government in the future. To this end he and his children must be educated, his wife and children cared for, his home protected, and governments must do for him the things which satisfy his needs and advance his welfare. The days of the rule of a small intellectual class and of government in the interests of such a class have largely passed, and the political equality which the Athenian Greeks first in the western world gave to the "citizens" of little Athens, the Industrial Revolution has forced modern and enlightened governments to give to all their people. In consequence, real democracy in government, education, justice, and social welfare is now in process of being attained generally, for the first time in the history of the world.

The effect of all these changes in the mode of living of peoples is written large on the national life. The political and industrial revolutions which have marked the ushering-in of the modern age have been far-reaching in their consequences. The old home life and home industries of an earlier period are passing, or have passed, never to return. Peoples in all advanced nations are rapidly swinging into the stream of a new and vastly more complex world civilization, which brings them into contact and competition with the best brains of all mankind. At the same time a great and ever-increasing specialization of human effort is taking place on all sides, and with new and ever more difficult social, political, educational, industrial, commercial, and human-life problems constantly presenting themselves for solution. The world has become both larger and smaller than it used to be, and even its remote parts are now being linked up, to a degree that a century ago would not have been deemed possible, with the future welfare of the nations which so long bore the brunt of the struggle for the preservation and advancement of civilization.

These changes and the school. It is these vast and far-reaching political, industrial, and social changes which have been the great actuating forces behind the evolution and expansion of the state school systems which we have so far described. The American and French political revolutions, with their new philosophy of political equality and state control of education, clearly inaugurated the movement for taking over the school from the Church and the making of it an important instrument of the State. The extension of the suffrage to new classes gave a clear political motive for the school, and to train young people to read and write and know the constitutional bases of liberty became a political necessity. The industrial revolution which followed, bringing in its train such extensive changes in labor and in the conditions surrounding home and child life, has since completely altered the face of the earlier educational problem. What was simple once has since become complex, and the complexity has increased with time. Once the ability to read and write and cipher distinguished the educated man from the uneducated; to-day the man or woman who knows only these simple arts is an uneducated person, hardly fit to cope with the struggle for existence in a modern world, and certainly not fitted to participate in the complex political and industrial life of which, in all advanced nations, he or she to-day forms a part.

It is the attempt to remould the school and to make of it a more potent instrument of the State for promoting national consciousness (R. 340) and political, social, and industrial welfare that has been behind the many changes and expansions and extensions of education which have marked the past half-century in all the leading world nations, and which underlie the most pressing problems in educational readjustment to-day. From mere teaching institutions, engaged in imparting a little religious instruction and some knowledge of the tools of learning, the school, in all the leading nations, has to-day been transformed into an institution for advancing national welfare. The leading purpose now is to train for political and social efficiency in the more democratic types of governments being instituted among peoples, and to impart to the young those industrial and social experiences once taught in the home, the trades, and on the farm, but which the coming of the factory system and city life have deprived them otherwise of knowing.

Education a constructive national tool. One result of the many political, social, and industrial changes of a century has been to evolve education into the great constructive tool of modern political society. For ages a church and private affair, and of no great importance for more than a few, it has to-day become the prime essential to good government and national progress, and is so recognized by the leading nations of the world. As people are freed from autocratic rule and take upon themselves the functions of government, and as they break loose from their age-old political, social, and industrial moorings and swing out into the current of the stream of modern world-civilization, the need for the education of the masses to enable them to steer safely their ship of state, and take their places among the stable governments of a modern world, becomes painfully evident. In the hands of an uneducated people a democratic form of government is a dangerous instrument, while the proper development of natural resources and the utilization of trade opportunities by backward peoples, without being exploited, is almost impossible. In Russia, Mexico, and the Central American "republics" we see the results of a democracy in the hands of an uneducated people. There, too often, the revolver instead of the ballot box is used to settle public issues, and instead of orderly government under law we find injustice and anarchy. A general system of education that will teach the fundamental principles of constitutional liberty, and apply science to production in agriculture and manufacturing, is almost the only solution for such conditions.

Expansion of the educational idea. In all lands to-day where there is an intelligent government, the education of the people through a system of state-controlled schools is regarded as of the first importance in moulding and shaping the destinies of the nation and promoting the country's welfare. Beginning with education to impart the ability to read and write and cipher, and as an aid to the political side of government, the education of the masses has been so expanded in scope during the century that to-day it includes aims, classes, types of schools, and forms of service scarcely dreamed of at the time the State began to take over the school from the Church, with a view to extending elementary educational advantages and promoting literacy and citizenship. What some of the more important of these expansions have been we shall state in a following chapter, but before doing so let us return to another phase of the problem — that of the progress of educational theory — and see what have been the main lines of this progress in the theory as to the educational purpose since the time when Pestalozzi formulated a theory for the secular school.

QUESTIONS FOR DISCUSSION

1. What does the emphasis on the People's High Schools in Denmark indicate as to the political status of the common people there?
2. Explain the educational prominence of Finland, compared with its neighbor Russia.
3. Show the close relation between the character of the school system developed in Japan and the character of its government. In China.
4. Show why the state-function conception of education is destined to be the ruling plan everywhere.
5. Show the close connection between the Industrial Revolution and a somewhat general diffusion of the fundamental principles revealed by the study of science.
6. Show how the Industrial Revolution has created entirely new problems in education, and what some of these are.
7. Show the connection between the Industrial Revolution and political enfranchisement.
8. Enumerate some of the educational problems we now face that we should not have had to deal with had the Industrial Revolution not taken place.
9. Why has the result of these changes been to extend the period of dependence and tutelage of children?
10. Outline an educational solution of the problem of Mexico. Of Russia. Of Persia.
11. Describe the expansion of the educational idea since the days when Pestalozzi formulated the theory for the secular school.

12. Contrast the American and the European secondary school in purpose. Why should the American be a free school, while those in Europe are tuition schools?
13. Show why the essentially democratic school system maintained in the United States would not be suited to an autocratic form of government.
14. Show that the weight of a priesthood and the force of religious instruction in the schools would be strong supports for monarchical forms of government.
15. Homogeneous monarchical nations look after the training of their teachers much better than does such a cosmopolitan nation as the United States. Why?

SELECTED READINGS

In the accompanying *Book of Readings* the following illustrative selections are reproduced:

333. Switzerland: Constitutional Provisions as to Education and Religious Freedom.
334. Japan: The Basic Documents of Japanese Education.
    (*a*) Preamble to the Education Code of 1872.
    (*b*) Imperial Rescript on Moral Education.
    (*c*) Instructions as to Lessons on Morals.
335. Ping Wen Kuo: Transformation of China by Education.
336. Mann: Education and National Prosperity.
337. Huxley: The Recent Progress of Science.
338. Anon.: Scientific Knowledge must precede Invention.
339. Ticknor: Illustrating Early Lack of Communication.
340. Monroe: The Struggle for National Realization.
341. Buisson, F.: The French Teacher and the National Spirit.
342. Fr. de Hovre: The German Emphasis on National Ends.
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*Friedel, V. H. *The German School as a War Nursery.*
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CHAPTER XXVIII

NEW CONCEPTIONS OF THE EDUCATIONAL PROCESS

I. THE PSYCHOLOGICAL ORGANIZATION OF ELEMENTARY INSTRUCTION

The beginnings of normal-school training. The training of would-be teachers for the work of instruction is an entirely modern proceeding. The first normal school established anywhere was that founded at Rheims, in northern France, in 1685, by Abbé de la Salle (p. 183). He had founded the Order of "The Brothers of the Christian Schools" the preceding year, to provide free religious instruction for children of the working classes in France (**R.** 182), and he conceived the new idea of creating a special school to train his prospective teachers for the teaching work of his Order. In addition to imparting a general education of the type of the time, and a thorough grounding in religion, his student teachers were trained to teach in practice schools, under the direction of experienced teachers. This was an entirely new idea.

The beginnings elsewhere, as we have previously pointed out were made in German lands, Francke's *Seminarium Præceptorum*, established at Halle in 1697, coming next in point of time. In 1738 Johann Julius Hecker (1707–68), one of Francke's teachers at Halle, established the first regular Seminary for Teachers in Prussia, and in 1748 he established a private *Lehrerseminar* in Berlin. In these two institutions he first showed the German people the possibilities of special training for secondary-school teachers. Something like a dozen Teachers' Seminaries had been founded in German lands before the close of the eighteenth century. A normal school was established in Denmark, by royal decree, as early as 1789, and five additional schools when the law organizing public instruction in Denmark was enacted, in 1814. In France the beginnings of state action came with the action of the National Convention, which decreed the establishment of the "Superior Normal School for France," in 1794 (p. 328). This institution, though, was short lived, and the real beginnings of the French higher normal school awaited the reorganizing work of Napoleon, in 1808 (p. 328; **R.** 283).

The schools just mentioned represent the first institutions in the history of the world organized for the purpose of training teachers to teach. The teachers they trained were intended primarily for the secondary schools, and the training given was largely academic in character. So long as the instruction in the vernacular school consisted chiefly of reading and the Catechism, and of hearing pupils recite what they had memorized, there was of course but little need for any special training for the teachers. It was not until after Pestalozzi had done his work and made his contribution that there was anything worth mentioning to train teachers for.

Pestalozzi's contribution. The memorable work done by Pestalozzi in Switzerland, during his quarter-century (1800–25) of effort at Burgdorf and Yverdon, changed the whole face of the preparation of teachers problem. His work was so fundamental that it completely redirected the education of children. Taking the seed-thought of Rousseau that sense-impression was "the only true foundation of human knowledge" (**R.** 267), he enlarged this to the conception of the mental development of human beings as being organic, and proceeding according to law. His extension of this idea of Rousseau's led him to declare that education was an individual development, a drawing-out and not a pouring-in; that the basis of all education exists in the nature of man; and that the method of education is to be sought and constructed. These were his great contributions. These ideas fitted in well with the rising tide of individualism which marked the late eighteenth and the early nineteenth centuries, and upon these contributions the modern secular elementary school has been built.

These ideas led Pestalozzi to emphasize sense perception and expression; to formulate the rule that in teaching we must proceed from the concrete to the abstract; and to construct a "faculty psychology" which conceived of education as "a harmonious development" of the different "faculties" of the mind. He also tried, unsuccessfully to be sure, to so organize the teaching process that eventually it could be so "mechanized" that there would be a regular A, B, C, for each type of instruction, which, once learned, would give perfection to a teacher. Largely out of these ideas and the new direction he gave to instruction the modern normal school for training teachers for the elementary schools arose.

Oral and objective teaching developed. Up to the time of

Pestalozzi, and for years after he had done his work, in many lands and places the instruction of children continued to be of the memorization of textbook matter and of the recitation type. The children learned what was down in the book, and recited the answers to the teacher. Many of the early textbooks were constructed on the plan of the older Catechism — that is, on a question and answer plan (**R.** 351 **a**). There was nothing for children to do but to memorize such text book material, or for the teacher but to see that the pupils knew the answers to the questions. It was school-keeping, not teaching, that teachers were engaged in.

The form of instruction worked out by Pestalozzi, based on sense-perception, reasoning, and individual judgment, called for a complete change in classroom procedure. What Pestalozzi tried most of all to do was to get children to use their senses and their minds, to look carefully, to count, to observe forms, to get, by means of their five important senses, clear impressions and ideas as to objects and life in the world about them, and then to think over what they had seen and be able to answer his questions, because they had observed carefully and reasoned clearly. Pestalozzi thus clearly subordinated the printed book to the use of the child's senses, and the repetition of mere words to clear ideas about things. Pestalozzi thus became one of the first real teachers.

This was an entirely new process, and for the first time in history a real "technique of instruction" was now called for. Dependence on the words of the text could no longer be relied upon. The oral instruction of a class group, using real objects, called for teaching skill. The class must be kept naturally interested and under control; the essential elements to be taught must be kept clearly in the mind of the teacher; the teacher must raise the right kind of questions, in the right order, to carry the class thinking along to the right conclusions; and, since so much of this type of instruction was not down in books, it called for a much more extended knowledge of the subject on the part of the teacher than the old type of school-keeping had done. The teacher must now both know and be able to organize and direct. Class lessons must be thought out in advance, and teacher-preparation in itself meant a great change in teaching procedure. Emancipated from dependence on the words of a text, and able to stand before a class full of a subject and able to question freely, teachers became con*scious of a new* strength and a professional skill unknown in the days of textbook reciting. Out of such teaching came oral language lessons, drill in speech usage, elementary science instruction, observational geography, mental arithmetic, music, and drawing, to add to the old instruction in the Catechism, reading, writing, and ciphering, and all these new subjects, taught according to Pestalozzian ideas as to purpose, called for an individual technique of instruction.

The normal school finds its place. These new ideas of Pestalozzi proved so important that during the first five or six decades of the nineteenth century the elementary school was made over. The new conception of the child as a slowly developing personality, demanding subject-matter and method suited to his stage of development, and the new conception of teaching as that of directing mental development instead of hearing recitations and "keeping school," now replaced the earlier knowledge-conception of school work. Where before the ability to organize and discipline a school had constituted the chief art of instruction, now *the ability* to teach scientifically took its place as the prime *professional* requisite. A "science and art" of teaching now arose,

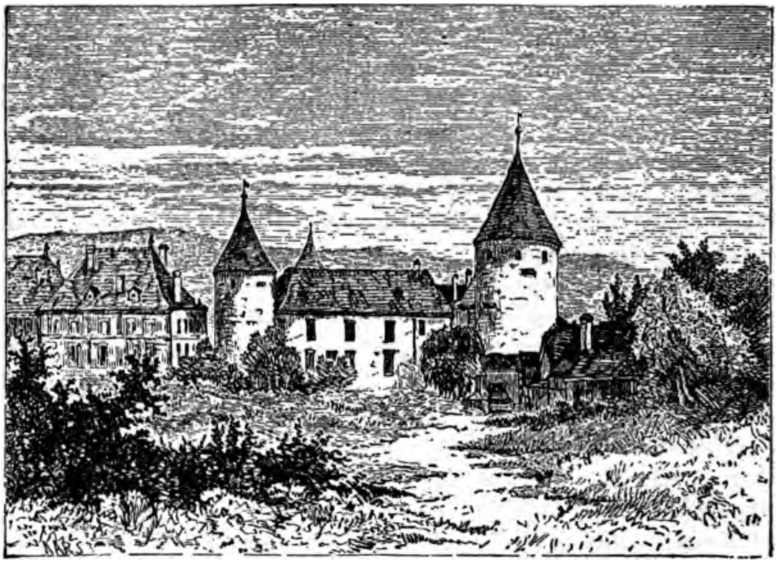

FIG. 98. THE FIRST MODERN NORMAL SCHOOL

The old castle at Yverdon, where Pestalozzi's Institute was conducted and his greatest success achieved.

methodology soon became a great subject; the new subject of pedagogy began to take form and secure recognition; and psychology became the guiding science of the school. As these changes took place, the normal school began to come into favor in the leading countries of Europe and in the United States, and in time has established itself everywhere as an important educational institution.

On July 3, 1839, the first state normal school in the United States opened in the town hall at Lexington, Massachusetts, with one teacher and three students. Later that same year a second state normal school was opened at Barre, and early the next year a third at Bridgewater, both in Massachusetts. For these the State Board of Education adopted a statement as to entrance requirements and a course of instruction (**R.** 350 **b**) which shows well the academic character of these early teaching institutions. Their success was largely due to the enthusiastic support given the new idea by Horace Mann. In an address at the dedication of the first building erected in America for normal-school purposes, in 1846, he expressed his deep belief as to the fundamental importance of such institutions (**R.** 350 **c**). By 1860 eleven state normal schools had been established in eight of the States of the American Union, and six private schools were also rendering similar services. Closely related was the Teachers' Institute, first definitely organized by Henry Barnard in Connecticut, in 1839, to offer four- to six-weeks summer courses for teachers in service, and these had been organized in fifteen of the American States by 1860. Since 1870 the establishment of state normal schools has been rapid in the United States, two hundred having been established by 1910, and many since. The United States, though, is as yet far from having a trained body of teachers for its elementary schools. For the high schools, it is only since about 1890 that the professional training of teachers for such service has really been begun.

Spread of the normal-school idea. The movement for the creation of normal schools to train teachers for the elementary schools has in time spread to many nations. As nation after nation has awakened to the desirability of establishing a system of modern-type state schools, a normal school to train leaders has often been among the first of the institutions created. The normal school, in consequence, is found to-day in all the continental European States; in all the English self-governing dominions; in nearly all the South American States; and in China, Japan, Siam, the Philippines, Cuba, Algiers, India, and other less important nations. In all these there is an attempt, often reaching as yet to but a small percentage of the teachers, to extend to them some of that training in the theory and art of instruction which has for long been so important a feature of the education of the elementary teacher in the German States, France, and the United States. Since about 1890 other nations have also begun to provide, as the German States and France have done for so long, some form of professional training for the teachers intended for their secondary schools as well.

Psychology becomes the master science. Everywhere the establishment of normal schools has meant the acceptance of the newer conceptions as to child development and the nature of the educational process. These are that the child is a slowly developing personality, needing careful study, and demanding subject-matter and method suited to his different stages of development. The new conception of teaching as that of directing and guiding the education of a child, instead of hearing recitations and "keeping school," in time replaced the earlier knowledge-conception of school work. Psychology accordingly became the guiding science of the school, and the imparting to prospective teachers proper ideas as to psychological procedure, and the proper methodology of instruction in each of the different elementary-school subjects, became the great work of the normal school. Teachers thus trained carried into the schools a new conception as to the nature of childhood; a new and a minute methodology of instruction; and a new enthusiasm for teaching; — all of which were important additions to school work.

A new methodology was soon worked out for all the subjects of instruction, both old and new. The centuries-old alphabet method of teaching reading was superseded by the word and sound methods; the new oral language instruction was raised to a position of first importance in developing pupil-thinking; spelling, word-analysis, and sentence-analysis were given much emphasis in the work of the school; the Pestalozzian mental arithmetic came as an important addition to the old ciphering of sums; the old writing from copies was changed into a drill subject, requiring careful teaching for its mastery; the "back to nature" ideas of Rousseau and Pestalozzi proved specially fruitful in the new study of geography, which called for observation out of doors, the study of type forms, and the substitution of the physical and human aspects of geography for the older political and statistical; object lessons on natural objects, and later science and nature study, were used to introduce children to a knowledge of nature and to train them in thinking and observation; while the new subjects of music and drawing came in, each with an elaborate technique of instruction.

By 1875 the normal school in all lands was finding plenty to do, and teaching, by the new methods and according to the new psychological procedure, seemed to many one of the most wonderful and most important occupations in the world.

II. NEW IDEAS FROM HERBARTIAN SOURCES

The work of Herbart. Taking up the problem as Pestalozzi left it, a German by the name of Johann Friedrich Herbart (1776–1841) carried it forward by organizing a truer psychology for the whole educational process, by erecting a new social aim for instruction, by formulating new steps in method, and by showing the place and the importance of properly organized instruction in history and literature in the education of the child. Though the two men were entirely different in type, and worked along entirely different lines, the connection between Herbart and Pestalozzi was, nevertheless, close.

The two men, however, approached the educational problem from entirely different angles. Pestalozzi gave nearly all his long life to teaching and human service, while Herbart taught only as a traveling private tutor for three years, and later a class of twenty children in his university practice school. Pestalozzi was a social reformer, a visionary, and an impractical enthusiast, but was possessed of a remarkable intuitive insight into child nature. Herbart, on the other hand, was a well-trained scholarly thinker, who spent the most of his life in the peaceful occupation of a professor of philosophy in a German university. It was while at Königsberg, between 1810 and 1832, and as an appendix to his work as professor of philosophy, that he organized a small practice school, conducted a Pedagogical Seminar, and worked out his educational theory and method. His work was a careful, scholarly attempt at the organization of education as a science, carried out amid the peace and quiet which a university atmosphere almost alone affords. He addressed himself chiefly to three things: *(1) the aim, (2)* the content, and (3) the method of instruction.

The aim and the content of education. Locke had set up as the aim of education the ideal of a physically sound gentleman. Rousseau had declared his aim to be to prepare his boy for life by developing naturally his inborn capacities. Pestalozzi had sought to regenerate society by means of education, and to prepare children for society by a "harmonious training" of their "faculties." Herbart rejected alike the conventional-social education of Locke, the natural and unsocial education of Rousseau, and the "faculty-psychology" conception of education of Pestalozzi. Instead he conceived of the mind as a unity, instead of being divided into "faculties," and the aim of education as broadly social rather than personal. The purpose of education, he said, was to prepare men to live properly in organized society, and hence the chief aim in education was not conventional fitness, natural development, mere knowledge, nor personal mental power, but personal character and social morality. This being the case, the educator should analyze the interests and occupations and social responsibilities of men as they are grouped in organized society, and, from such analyses, deduce the means and the method of instruction. Man's interests, he said, come from two main sources — his contact with the things in his environment (real things, sense-impressions), and from his relations with human beings (social intercourse). His social responsibilities and duties are determined by the nature of the social organization of which he forms a part.

Pestalozzi had provided fairly well for the first group of contacts, through his instruction in objects, home geography, numbers, and geometric form. For the second group of contacts Pestalozzi had developed only oral language, and to this Herbart now added the two important studies of literature and history, and history with the emphasis on the social rather than the political side. Two new elementary-school subjects were thus developed, each important in revealing to man his place in the social whole. History in particular Herbart conceived to be a study of the first importance for revealing proper human relationships, and leading men to social and national "good-will."

The chief purpose of education Herbart held to be to develop personal character and to prepare for social usefulness (**R. 355**). These virtues, he held, proceeded from enough of the right kind of *knowledge*, properly interpreted to the pupil so that clear ideas as *to relationships* might be formed. To impart this knowledge interest must be awakened, and to arouse interest in the many kinds of knowledge needed, a "many-sided" development must take place. From full knowledge, and with proper instruction by the teacher, clear ideas or concepts might be formed, and clear ideas ought to lead to right action, and right action to personal character — the aim of all instruction. Herbart was the first writer on education to place the great emphasis on proper instruction, and to exalt teaching and proper teaching-procedure instead of mere knowledge or intellectual discipline. He thus conceived of the educational process as a science in itself, having a definite content and method, and worthy of special study by those who desire to teach.

Herbartian method. With these ideas as to the aim and content of instruction, Herbart worked out a theory of the instructional process and a method of instruction (**R.** 356). Interest he held to be of first importance as a prerequisite to good instruction. If given spontaneously, well and good; but, if necessary, forced interest must be resorted to. Skill in instruction is in part to be determined by the ability of the teacher to secure interest without resorting to force on the one hand or sugar-coating of the subject on the other. Taking Pestalozzi's idea that the purpose of the teacher was to give pupils new experiences through contacts with real things, without assuming that the pupils already had such, Herbart elaborated the process by which new knowledge is assimilated in terms of what one already knows, and from his elaboration of this principle the doctrine of apperception — that is, the apperceiving or comprehending of new knowledge in terms of the old — has been fixed as an important principle in educational psychology. Good instruction, then, involves first putting the child into a proper frame of mind to apperceive the new knowledge, and hence this becomes a corner-stone of all good teaching method.

Herbart did not always rely on such methods, holding that the "committing to memory" of certain necessary facts often was necessary, but he held that the mere memorizing of isolated facts, which had characterized school instruction for ages, had little value for either educational or moral ends. The teaching of mere facts often was very necessary, but such instruction called for a methodical organization of the facts by the teacher, so as to make their learning contribute to some definite purpose. This called *for a purpose in* instruction; the organization of the facts necessary to be taught so as to select the most useful ones; the connection of these so as to establish the principle which was the purpose of the instruction; and training in systematic thinking by applying the principle to new problems of the type being studied. The carrying-out of such ideas meant the careful organization of the teaching process and teaching method, to secure certain predetermined ends in child development, instead of mere miscellaneous memorizing and school-keeping.

The Herbartian movement in Germany. Herbart died in 1841, without having awakened any general interest in his ideas, and they remained virtually unnoticed until 1865. In that year a professor at Leipzig, Tuiskon Ziller (1817–1883), published a book setting forth Herbart's idea of instruction as a moral force. This attracted much attention, and led to the formation (1868) of a scientific society for the study of Herbart's ideas. Ziller and his followers now elaborated Herbart's ideas, advanced the theory of culture-epochs in child development, the theory of concentration in studies, and elaborated the four steps in the process of instruction, as described by Herbart, into the five formal steps of the modern Herbartian school.

In 1874 a pedagogical seminary and practice school was organized at the University of Jena, and in 1885 this came under the direction of Professor William Rein, a pupil of Ziller's, who developed the practice school according to the ideas of Ziller. A detailed course of study for this school, filling two large volumes, was worked out, and the practice lessons given were thoroughly planned beforehand and the methods employed were subjected to a searching analysis after the lesson had been given.

Herbartian ideas in the United States. For a time, under the inspiration of Ziller and Rein, Jena became an educational center to which students went from many lands. From the work at Jena Herbartian ideas have spread which have modified elementary educational procedure generally. In particular did the work at Jena make a deep impression in the United States. Between 1885 and 1890 a number of Americans studied at Jena and, returning, brought back to the United States this Ziller-Rein-Jena brand of Herbartian ideas and practices. From the first the new ideas met with enthusiastic approval.

New methods of instruction in history and literature, and a new psychology, were now added to the normal-school professional instruction. Though this psychology has since been out-grown (R. 357), it has been very useful in shaping pedagogical thought. New courses of study for the training-schools were now worked out in which the elementary-school subjects were divided into drill subjects, content subjects, and motor-activity subjects.[1] Apperception, interest, correlation, social purpose, moral education, citizenship training, and recitation methods became new terms to conjure with. From the normal schools these ideas spread rapidly to the better city school systems of the time, and soon found their way into courses of study everywhere. Practice schools and the model lessons in dozens of normal schools were remodeled after the pattern of those at Jena, and for a decade Herbartian ideas and the new child study vied with one another for the place of first importance in educational thinking. The Herbartian wave of the nineties resembled the Pestalozzian enthusiasm of the sixties. Each for a time furnished the new ideas in education, each introduced elements of importance into the elementary-school instruction, each deeply influenced the training of teachers in normal schools by giving a new turn to the instruction there, and each gradually settled down into its proper place in educational practice and history.

The Herbartian contribution. To the Herbartians we are indebted in particular for important new conceptions as to the teaching of history and literature, which have modified all our subsequent procedure; for the introduction of history teaching in some form into all the elementary-school grades; for the emphasis on a new social point of view in the teaching of history and geography; for the new emphasis on the moral aim in instruction; for a new and a truer educational psychology; and for a better organization of the technique of classroom instruction. In particular Herbart gave emphasis to that part of educational development which comes from without — environment acting upon the child — as contrasted with the emphasis Pestalozzi had placed on mental development from within and according to organic law. With

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[1] The studies which have come to characterize the modern elementary school may now be classified under the following headings:

Drill subjects	*Content subjects*	*Expression subjects*
Reading	Literature	Kindergarten Work
Writing	Geography	Music
Spelling	History	Manual Arts
Language	Civic Studies	Domestic Arts
Arithmetic	Manners and Conduct	Plays and Games
	Nature Study	School Gardening
	Agriculture	Vocational Subjects

the introduction of normal child activities, which came from another source about this same time, the elementary-school curriculum as we now have it was practically complete, and the elementary school of 1850 was completely made over to form the elementary school of the beginning of the twentieth century.

III. THE KINDERGARTEN, PLAY, AND MANUAL ACTIVITIES

To another German, Friedrich Froebel (1782–1852), we are indebted, directly or indirectly, for three other additions to elementary education — the kindergarten, the play idea, and handwork activities.

Origin of the kindergarten. Of German parentage, the son of a rural clergyman, early estranged from his parents, retiring and introspective by nature, having led a most unhappy childhood, and apprenticed to a forester without his wishes being consulted, at twenty-three Froebel decided to become a schoolteacher and visited Pestalozzi in Switzerland. Two years later he became the tutor of three boys, and then spent the years 1808–10 as a student and teacher in Pestalozzi's Institute at Yverdon. During his years there Froebel was deeply impressed with the great value of music and play in the education of children, and of all that he carried away from Pestalozzi's institution these ideas were most persistent. After serving in a variety of occupations — student, soldier against Napoleon, and curator in a museum of mineralogy — he finally opened a little private school, in 1816, which he conducted for a decade along Pestalozzian lines. In this the play idea, music, and the self-activity of the pupils were uppermost. The school was a failure, financially, but while conducting it Froebel thought out and published (1826) his most important pedagogical work — *The Education of Man.*

Gradually Froebel became convinced that the most needed reform in education concerned the early years of childhood. His own youth had been most unhappy, and to this phase of education he now addressed himself. After a period as a teacher in Switzerland he returned to Germany and opened a school for little children in which plays, games, songs, and occupations involving self-activity were the dominating characteristics, and in 1840 he hit upon the name *Kindergarten* for it. In 1843 his *Mutter- und Kose-Lieder*, a book of fifty songs and games, was published. This has been translated into almost all languages.

Spread of the kindergarten idea. After a series of unsuccessful

Johann Friedrich Herbart (1776–1841)
Organizer of the Psychology of Instruction

Friedrich Wilhelm Froebel (1782–1852)
Founder of the Kindergarten

Plate 6. Two Leaders in the Reorganization of Educational Theory

efforts to bring his new idea to the attention of educators, Froebel, himself rather a feminine type, became discouraged and resolved to address himself henceforth to women, as they seemed much more capable of understanding him, and to the training of teachers in the new ideas. Froebel was fortunate in securing as one of his most ardent disciples, just before his death, the Baroness Bertha von Marenholtz Bülow-Wendhausen (1810–93), who did more than any other person to make his work known. Meeting, in 1849, the man mentioned to her as "an old fool," she understood him, and spent the remainder of her life in bringing to the attention of the world the work of this unworldly man who did not know how to make it known for himself. In 1851 the Prussian Government, fearing some revolutionary designs in the new idea, and acting in a manner thoroughly characteristic of the political reaction which by that time had taken hold of all German official life, forbade kindergartens in Prussia. The Baroness then went to London and lectured there on Froebel's ideas, organizing kindergartens in the English "ragged schools." Here, by contrast, she met with a cordial reception. She later expounded Froebelian ideas in Paris, Italy, Switzerland, Holland, Belgium, and (after 1860, when the prohibition was removed) in Germany. In 1870 she founded a kindergarten training-college in Dresden. Many of her writings have been translated into English, and published in the United States.

Considering the importance of this work, and the time which has since elapsed, the kindergarten idea has made relatively small progress on the continent of Europe. Its spirit does not harmonize with autocratic government. In Germany and the old Austro-Hungary it had made but little progress up to 1914. Its greatest progress in Europe, perhaps, has been in democratic Switzerland. In England and France, the two great leaders in democratic government, the Infant-School development, which came earlier, has prevented any marked growth of the kindergarten. In England, though, the Infant School has recently been entirely transformed by the introduction into it of the kindergarten spirit. In France, infant education has taken a somewhat different direction.

In the United States the kindergarten idea has met with a most cordial reception. In no country in the world has the spirit of the kindergarten been so caught and applied to school work, and *probably nowhere* has the original kindergarten idea been so expanded and improved. The first kindergarten in the United States was a German kindergarten, established at Watertown, Wisconsin, in 1855, by Mrs. Carl Schurz, a pupil of Froebel. During the next fifteen years some ten other kindergartens were organized in German-speaking communities. The first English-speaking kindergarten was opened privately in Boston, in 1860, by Miss Elizabeth Peabody. In 1868 a private training-college for kindergartners was opened in Boston, largely through Miss Peabody's influence, by Madame Matilde Kriege and her daughter, who had recently arrived from Germany. In 1872 Miss Marie Boelte opened a similar teacher-training school in New York City, and in 1873 her pupil, Miss Susan Blow, accepted the invitation of Superintendent William T. Harris, of St. Louis, to go there and open the first public-school kindergarten in the United States.

To-day the kindergarten is found in some form in nearly all countries in the world, having been carried to all continents by missionaries, educational enthusiasts, and interested governments. Japan early adopted the idea, and China is now beginning to do so.

The kindergarten idea. The dominant idea in the kindergarten is natural but directed self-activity, focused upon educational, social, and moral ends. Froebel believed in the continuity of a child's life from infancy onward, and that self-activity, determined by the child's interests and desires and intelligently directed, was essential to the unfolding of the child's inborn capacities. He saw, more clearly than any one before him had done, the unutilized wealth of the child's world; that the child's chief characteristic is self-activity; the desirability of the child finding himself through play; and that the work of the school during these early years was to supplement the family by drawing out the child and awakening the ideal side of his nature. To these ends doing, self-activity, and expression became fundamental to the kindergarten, and movement, gesture, directed play, song, color, the story, and human activities a part of kindergarten technique. Nature study and school gardening were given a prominent place, and motor-activity much called into play. Advancing far beyond Pestalozzi's principle of sense-impressions, Froebel insisted on motor-activity and learning by doing (**R. 358**).

Froebel, as well as Herbart, also saw the social importance of *education,* and that man must realize himself not independently amid nature, as Rousseau had said, but as a social animal in coöperation with his fellowmen. Hence he made his schoolroom a miniature of society, a place where courtesy and helpfulness and social coöperation were prominent features. This social and at times reverent atmosphere of the kindergarten has always been a marked characteristic of its work. To bring out social ideas many dramatic games, such as shoemaker, carpenter, smith, and farmer, were devised and set to music. The "story" by the teacher was made prominent, and this was retold in language, acted, sung, and often worked out constructively in clay, blocks, or paper. Other games to develop skill were worked out, and use was made of sand, clay, paper, cardboard, and color. The "gifts" and "occupations" which Froebel devised were intended to develop constructive and æsthetic power, and to provide for connection and development they were arranged into an organized series of playthings. Individual development as its aim, motor-expression as its method, and social coöperation as its means were the characteristic ideas of this new school for little children (**R. 358**).

The contribution of the kindergarten. Wholly aside from the specific training given children during the year, year and a half, or two years they spend in this type of school, the addition of the kindergarten to elementary-school work has been a force of very large significance and usefulness. The idea that the child is primarily an active and not a learning animal has been given new emphasis, and that education comes chiefly by doing has been given new force. The idea that a child's chief business is play has been a new conception of large educational value. The elimination of book education and harsh discipline in the kindergarten has been an idea that has slowly but gradually been extended upward into the lower grades of the elementary school.

To-day, largely as a result of the spreading of the kindergarten spirit, the world is coming to recognize play and games at something like their real social, moral, and educational values, wholly aside from their benefits as concern physical welfare, and in many places directed play is being scheduled as a regular subject in school programs. Music, too, has attained new emphasis since the coming of the kindergarten, and methods of teaching music more in harmony with kindergarten ideas have been introduced into the schools.

Instruction in the manual activities. Froebel not only introduced constructive work — paper-folding, weaving, needlework, and work with sand and clay and color — into the kindergarten, but he also proposed to extend and develop such work for the upper years of schooling in a school for hand training which he outlined, but did not establish. His proposed plan included the elements of the so-called manual-training idea, developed later, and he justified such instruction on the same educational grounds that we advance to-day. It was not to teach a boy a trade, as Rousseau had advocated, or to train children in sense-perception, as Pestalozzi had employed all his manual activities, but as a form of educational expression, and for the purpose of developing creative power within the child. The idea was advocated by a number of thinkers, about 1850 to 1860, but the movement took its rise in Finland (1866), Sweden (1872), and Russia.

Spread of the manual-training idea. France was the first of the larger European nations to adopt this new addition to elementary-school instruction, a training-school being organized at Paris in 1873, and, in 1882, the instruction in manual activities was ordered introduced into all the primary schools of France. It has required time, though, to provide workrooms and to realize this idea, and it is still lacking in complete accomplishment. In England the work was first introduced in London, about 1887. The government at once accepted the idea, encouraged its spread, and began to aid in the training of teachers. By 1900 the work was found in all the larger cities, and included cooking and sewing for girls, as well as manual work for boys. The training for girls goes back still farther, and was an outgrowth of the earlier "schools of industry" established to train girls for domestic service (**R.** 241). By 1846 instruction in needlework had been begun in earnest in England. In German lands needlework was also an early school subject, while some domestic training for girls had been provided in most of the cities, before 1914. Manual training for boys, though, despite much propaganda work, had made but little headway up to that time. As in the case of the kindergarten, the initiative and self-expression aspects of the manual-training movement made no appeal to those responsible for the work of the people's schools, and, in consequence, the manual activities have in German lands been reserved largely for the continuation and vocational schools for older pupils.

In the United States the manual-training and household-arts *ideas have* found a very ready welcome. Curious as it may seem, the first introduction to the United States of this new form of instruction came through the exhibit made by the Russian government at the Centennial Exhibition of 1876, showing the work in wood and iron made by the pupils at the Imperial Technical Institute at Moscow. This, however, was not the Swedish sloyd, but a type of work especially adapted to secondary-school instruction. In consequence the movement for instruction in the manual activities in the United States, unlike in other nations, began (1880) as a highly organized technical type of high-school instruction, while the elementary-school sloyd (1882) and the household arts (1885) for girls came in later. This type of technical high school has since developed rapidly in this country, has rendered an important educational service, and is a peculiarly American creation. In Europe the manual-training idea has been confined to the elementary school, and no institution exists there which parallels these costly and well-equipped American technical secondary schools.

From a few beginnings in eastern cities the movement spread, though at first rather slowly. By 1900 approximately forty cities, nearly all of them in the North Atlantic group of States, had introduced work in manual training and the household arts into their elementary schools, but since that time the work has been extended to practically all cities, and to many towns and rural communities as well.

Contribution of the manual-activities idea. These new forms of school work were at first advocated on the grounds of formal discipline — that they trained the reasoning, exercised the powers of observation, and strengthened the will. The "exercises," true to such a conception, were quite formal and uniform for all. With the breakdown of the "faculty psychology," and the abandonment in large part of the doctrine of formal discipline in the training of the mind, the whole manual-training and household-arts work has had to be reshaped.

To-day the instruction given in manual work and the household arts in all their forms has been further changed to make of them educational instruments for interpreting the fields of art and industry and home-life in terms of their social significance and usefulness. Through these two new forms of education, also, the pupils in the elementary schools have been given training in expression and an insight into the practical work of life impossible in the old textbook type of elementary school. In the kindergarten, manual work, and the household arts, Froebel's principle of education through directed self-activity and self-expression has born abundant fruit.

In the hands of French, English, and American educators the original manual-arts idea has been greatly expanded. In France some form of expression has been worked out for all grades of the primary school, and the work has been closely connected with art and industry on the one hand and with the home-life of the people on the other. In England the project system as applied to industry, and the household arts with reference to home-life, have been emphasized. In the United States the work has been individualized perhaps more than anywhere else, applied in many new directions — clay, leather, cement, metal — and used as a very important instrument for self-expression and the development of individual thinking.

IV. THE ADDITION OF SCIENCE STUDY

The gradual extension of the interest in science. A very prominent feature of world educational development, since about the middle of the nineteenth century, has been the general introduction into the schools of the study of science. It is no exaggeration of the importance of this to say that no addition of new subject-matter and no change in the direction and purpose of education, since that time, has been of greater importance for the welfare of mankind, or more significant of new world conditions, than has been the emphasis recently placed, in all divisions of state school systems, on instruction in the principles and the applications of science.

The great early development of scientific study had been carried on in a few universities or had been done by independent scholars, and had but little influenced instruction in the colleges or the schools below.

Science instruction reaches the schools but slowly. The text-book organization of this new scientific knowledge, for teaching purposes, and its incorporation into the instruction of the schools, took place but slowly.

1. *The elementary schools.* The greatest and the earliest success was made in German lands. There the pioneer work of Basedow (p. 294) and the Philanthropinists had awakened a widespread *interest* in scientific studies. In Switzerland, too, Pestalozzi *had* developed elementary science study and home geography,

and, when Pestalozzian methods were introduced into the schools of Prussia, the study of elementary science (*Realien*) soon became a feature of the *Volksschule* instruction. From Prussia it spread to all German lands. In England the Pestalozzian idea was introduced into the Infant Schools, though in a very formal fashion, under the heading of object lessons. In this form elementary science study reached the United States, about 1860, though a decade later well-organized courses in elementary science instruction began to be introduced into the American elementary schools.

2. *The secondary schools.* In the secondary schools the earliest work of importance in introducing the new scientific subjects was done by the Germans and the French. In German lands the *Realschule* obtained an early start (1747), and the new instruction in mathematics and science it included had begun to be adopted by the German secondary schools, especially in the South German States, before the period of reaction set in. During the reign of Napoleon the scientific course in the French *Lycées* was given special prominence. After about 1815, and continuing until after 1848, practical and thought-provoking studies were under an official ban in both countries, and classical studies were specially favored. Finally, in 1852 in France and in 1859 in Prussia, responding to changed political conditions and new economic demands, both the scientific course in the *Lycées* and the *Realschulen* were given official recognition, and thereafter received increasing state favor and support. The scientific idea also took deep root in Denmark. There the secondary schools were modernized, in 1809, when the sciences were given an important place, and again in 1850, when many of the Latin schools were transformed into *Realskoler*.

In the United States the academies and the early high schools both had introduced quite an amount of mathematics and book-science, and, after about 1875, the development of laboratory instruction in science in the growing high schools took place rather rapidly. Fellenberg's work in Switzerland (p. 302) had also awakened much interest in the United States, and by 1830 a number of Schools of Industry and Science had begun to appear. These made instruction in mathematics and science prominent features of their work.

The challenge of Herbert Spencer. By the middle of the nineteenth century the scientific and industrial revolutions had produced important changes in the conditions of living in all the then important world nations. Particularly in the German States, France, England, and the United States had the effects of the revolutions in manufacturing and living been felt. In consequence there had been, for some time, a growing controversy between the partisans of the older classical training and the newer scientific studies as to their relative worth and importance, both for intellectual discipline and as preparation for intelligent living, and by the middle of the nineteenth century this had become quite sharp. The "faculty psychology," upon which the theory of the discipline of the powers of the mind by the classics was largely based, was attacked, and the contention was advanced that the content of studies was of more importance in education than was method and drill. The advocates of the newer studies contended that a study of the classics no longer provided a suitable preparation for intelligent living, and the question of the relative worth of the older and newer studies elicited more and more discussion as the century advanced.

In 1859 one of England's greatest scholars, Herbert Spencer, brought the whole question to a sharp issue by the publication of a remarkably incisive essay on "What Knowledge is of Most Worth?" In this he declared that the purpose of education was to "prepare us for complete living," and that the only way to judge of the value of an educational course was first to classify, in the order of their importance, the leading activities and needs of life, and then measure the course of study by how fully it offers such a preparation. Doing so (R. 362), and applying such a test, he concluded that of all subjects a knowledge of science (R. 363) "was always most useful for preparation for life," and therefore the type of knowledge of most worth. In three other essays he recommended a complete change from the classical type of training which had dominated English secondary education since the days of the Renaissance. Still more, instead of a few being educated by a "cultural discipline" for a life of learning and leisure, he urged

FIG. 99. HERBERT SPENCER (1820–1903)

general instruction in science, that all might receive training and help for the daily duties of life.

These essays attracted wide attention, not only in England but in many other lands as well. They were a statement, in clear and forceful English, of the best ideas of the educational reformers for three centuries. In his statement of the principles upon which sound intellectual education should be based he merely enunciated theses for which educational reformers had stood since the days of Ratke and Comenius. In his treatment of moral and physical education he voiced the best ideas of John Locke. Spencer's great service was in giving forceful expression to ideas which, by 1860, had become current, and in so doing he pushed to the front anew the question of educational values. The scientific and industrial revolutions had prepared the way for a redirection of national education, and the time was ripe in England, France, German lands, and the United States for such a discussion. As a result, though the questions he raised are still in part unsettled, a great change in assigned values has since been effected not only in these nations, but in most other nations and lands which have drawn the inspiration for their educational systems from them. Though his work was not specially original, we must nevertheless class Herbert Spencer as one of the great writers on educational aims and purposes, and his book as one of the great influences in reshaping educational practice. He gave a new emphasis to the work of all who had preceded him, and out of the discussion which ensued came a new and a greatly enlarged estimate as to the importance of science study in all divisions of the school.

The new educational purpose. It is perhaps not too much to say that out of Spencer's gathering-up and forceful statement of the best ideas of his time, and the discussion which followed, a new conception of the educational purpose as adjustment to the life one is to live — physical, economic, social, moral, political — was clearly formulated, and a new definition of a liberal education was framed.

The inter-relation between the movement for the study of the sciences and the other movements for the improvement of instruction which we have so far described in this chapter, was close. Pestalozzi had emphasized instruction in geography and the study of nature; Froebel had given a prominent place to *nature study and school* gardening; the manual-arts work tended to exhibit industrial processes and relationships; and the scientific emphasis on content rather than drill was in harmony with the theories of all the modern reformers. Still more, the scientific movement was in close harmony with the new individualistic tendency of the early part of the nineteenth century, and with the movements for the improvement of individual and national welfare which have been so prominent a characteristic of the latter half of the century.

V. SOCIAL MEANING OF THESE CHANGES

A century of progress. Pestalozzi, true to the individualistic spirit of the age in which he lived and worked, had seen education as an individual development, and the ends of education as individual ends. The spirit of the French Revolutionary period was the spirit of individualism. With the progress of the Industrial Revolution and the consequent rise of new social problems, the emphasis was gradually shifted from the individual to society — from the single man to the man in the mass. The first educational thinker of importance to see and clearly state this new conception in terms of the school was Herbart. Seeing the educational purpose in far clearer perspective than had those who had gone before him, he showed that education must have for its function the preparation of man to live in organized society, and that character and social morality, rather than individual development, must in consequence be the larger aims. Froebel, possessed of something of the same insight, and seeing clearly the educational importance of activity and expression, had opened up for children a wealth of new contacts with the world about them in the new type of educational institution which he created. His principles, he said, when thoroughly worked out and applied to education "would revolutionize the world."

Since this early pioneer work changes in school work have been numerous and of far-reaching importance. The methods and purpose of instruction in the older subjects have been revised; new studies, which would serve to interpret to the young the industrial and social revolutions of the nineteenth century, have been introduced; the expression-subjects — the domestic arts, music, drawing, clay-modeling, color work, the manual arts, nature study, gardening — have given a new direction to school work; and the study of science and the vocations has attained to a place of importance previously unknown. During the past half-century the school has been transformed, in the principal world nations, from a disciplinary institution where drill in mastering the rudiments of knowledge was given, into an instrument of democracy calculated to train young people for living, for useful service in the office and shop and home, and to prepare them for intelligent participation in the increasingly complex social and political and industrial life of a modern world. This transformation of the school has not always been easy (**R.** 365), but the vastly changed conditions of modern life have demanded such a transformation in all progressive nations.

The contribution of John Dewey. The foremost American interpreter, in terms of the school, of the vast social and industrial changes which have marked the nineteenth century, is John Dewey (1859–). Better perhaps than any one else he has thought out and stated a new educational philosophy, suited to the changed and changing conditions of human living. His work, both experimental and theoretical, has tended both to re-psychologize (**R.** 364) and socialize education; to give to it a practical content, along scientific and industrial lines; and to interpret to the child the new social and industrial conditions of modern society by connecting the activities of the school closely with those of real life.

Starting with the premises that "the school cannot be a preparation for social life except as it reproduces the typical conditions of social life"; that "industrial activities are the most influential factors in determining the thought, the ideals, and the social organization of a people"; and that "the school should be life, not a preparation for living"; Dewey for a time conducted an experimental school, for children from four to thirteen years of age, to give concrete expression to his educational ideas. These, first consciously set forth by Froebel, were:

1. That the primary business of the school is to train in coöperative and mutually helpful living. . . .
2. That the primary root of all educational activity is in the instinctive, impulsive attitudes and activities of the child, and not in the presentation and application of external material.
3. That these individual tendencies and activities are organized and directed through the uses made of them in keeping up the coöperative living . . . taking advantage of them to reproduce, on the child's plane, the typical doings and occupations of the larger, maturer society into which he is finally to go forth; and that it is through *production and creative use that valuable knowledge is clinched.*

The work of this school was of fundamental importance in directing the reorganization of the work of the kindergarten along different and larger lines, and also has been of significance in redirecting the instruction in both the social subjects — history (R. 366), literature, etc. — and the manual, domestic, and artistic activities of the school. In his subsequent writings he may be said to have stated an important new philosophy for the school in terms of modern social, political, and industrial needs.

The Dewey educational philosophy. Believing that the public school is the chief remedy for the ills of organized society, Professor Dewey has tried to show how to change the work of the school so as to make it a miniature of society itself. Social efficiency, and not mere knowledge, he has conceived to be the end, and this social efficiency is to be produced through participation in the activities of an institution of society, the school. The different parts of the school system thus become a unified institution, in which children are taught how to live amid the constantly increasing complexities of modern social and industrial life.

Education, therefore, in Dewey's conception, involves not merely learning, but play, construction, use of tools, contact with nature, expression, and activity; and the school should be a place where children are working rather than listening, learning life by living life, and becoming acquainted with social institutions and industrial processes by studying them. The work of the school is in large part to reduce the complexity of modern life to such terms as children can understand, and to introduce the child to modern life through simplified experiences. Its primary business may be said to be to train children in coöperative and mutually helpful living. The virtues of a school, as Dewey points out, are learning by doing; the use of muscles, sight and feeling, as well as hearing; and the employment of energy, originality, and initiative. The virtues of the school in the past were the colorless, negative virtues of obedience, docility, and submission. Mere obedience and the careful performance of imposed tasks he holds to be not only a poor preparation for social and industrial efficiency, but a poor preparation for democratic society and government as well. Responsibility for good government, under any democratic form of organization, rests with all, and the school should prepare for the political life of to-morrow by training its pupils to meet responsibilities, developing initiative, awakening social insight, and causing each to shoulder a fair share of the work of government in the school.

We have now before us the great contributions to a philosophy for the educational process made since the beginning of the nineteenth century. Many other workers in different lands, but more particularly in German lands, France, Italy, England, and the United States, have added their labors to the expansion and redirection of the school. They are too numerous to mention and, though often nationally important, need not be included here. Still more, the contributions of Pestalozzi, Herbart, Froebel, Spencer, Dewey, and their followers and disciples are so interwoven in the educational theory and practice of to-day that it is in most cases impossible to separate them from one another.

QUESTIONS FOR DISCUSSION

1. How do you explain the long-continued objection to teacher-training?
2. Contrast "oral and objective teaching" with the former "individual instruction."
3. Show how complete a change in classroom procedure this involved.
4. Show how Pestalozzian ideas necessitated a "technique of instruction."
5. Why is it that Pestalozzian ideas as to language and arithmetic instruction have so slowly influenced the teaching of grammar, language, and arithmetic?
6. How do you explain the decline in importance of the once-popular mental arithmetic?
7. Show how child study was a natural development from the Pestalozzian psychology and methodology.
8. Explain what is meant by the statements that Herbart rejected:
    - (*a*) The conventional-social ideal of Locke.
    - (*b*) The unsocial ideal of Rousseau.
    - (*c*) The "faculty-psychology" conception of Pestalozzi.
9. Explain what is meant by saying that Herbart conceived of education as broadly social, rather than personal.
10. Show in what ways and to what extent Herbart:
    - (*a*) Enlarged our conception of the educational process.
    - (*b*) Improved the instruction content and process.
11. Explain why Herbartian ideas took so much more quickly in the United States than did Pestalozzianism.
12. State the essentials of the kindergarten idea, and the psychology behind it.
13. State the contribution of the kindergarten idea to education.
14. Show the connection between the sense impression ideas of Pestalozzi, the self-activity of Froebel, and the manual activities of the modern elementary school.
15. Explain why scientific studies came into the schools so slowly, up to about 1860, and so very rapidly after about that time.
16. State the comparative importance of content and drill in education.

17. Does the reasoning of Herbert Spencer appeal to you as sound? If not, why not?
18. Show how the argument of Spencer for the study of science was also an argument for a more general diffusion of educational advantages.
19. Would schools have advanced in importance as they have done had the industrial revolution not taken place? Why?
20. Why is more extended education called for as "industrial life becomes more diversified, its parts narrower, and its processes more concealed"?
21. Point out the social significance of the educational work of John Dewey.
22. Point out the value, in the new order of society, of each group of school subjects listed in footnote 1 on page 415.
23. Contrast the virtues of a school before Pestalozzi's time and those of a modern school.

SELECTED READINGS

In the accompanying *Book of Readings* the following selections illustrative of the contents of this chapter are reproduced:

344. Bache: The German Seminaries for Teachers.
345. Bache: A German Teachers' Seminary Described.
346. Bache: A French Normal School Described.
347. Barnard: Beginnings of Teacher-Training in England.
348. Barnard: The Pupil-Teacher System Described.
349. Clinton: Recommendation for Teacher-Training Schools.
350. Massachusetts: Organizing the First Normal Schools.
    (*a*) The Organizing Law.
    (*b*) Admission and Instruction in.
    (*c*) Mann: Importance of the Normal School.
351. Early Textbooks: Examples of Instruction from
    (*a*) Davenport: History of the United States.
    (*b*) Morse: Elements of Geography—Map.
    (*c*) Morse: Elements of Geography.
352. Murray: A Typical Teacher's Contract.
353. Bache: The Elementary Schools of Berlin in 1838.
354. Providence: Grading the Schools of.
355. Felkin: Herbart's Educational Ideas.
356. Felkin: Herbart's Educational Ideas Applied.
357. Titchener: Herbart and Modern Psychology.
358. Marenholtz-Bülow: Froebel's Educational Views.
359. Huxley: English and German Universities Contrasted.
360. Huxley: Mid-nineteenth-Century Elementary Education in England.
361. Huxley: Mid-nineteenth-Century Secondary Education in England.
362. Spencer: What Knowledge is of Most Worth?
363. Spencer: Conclusions as to the Importance of Science.
364. Dewey: The Old and New Psychology Contrasted.
365. Ping: Difficulties in Transforming the School.
    (*a*) Relating Education to Life.
    (*b*) The Old Teacher and the New System.
366. Dewey: Socialization of School Work illustrated by History.

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Vanderwalker, N. C. *The Kindergarten in American Education.*

CHAPTER XXIX

NEW TENDENCIES AND EXPANSIONS

I. POLITICAL

The enlarged conception of public education. The new ideas as to the purpose and functions of the State promulgated by English and French eighteenth-century thinkers, and given concrete expression in the American and French revolutions near the close of the century, imparted, as we have seen, a new meaning to the school and a new purpose to the education of a people. In the theoretical discussion of education by Rousseau and the empirical work of Pestalozzi a new individualistic theory for a secular school was created, and this Prussia, for long moving in that direction, first adopted as a basis for the state school system it early organized to serve national ends. The new American States, also long moving toward state organization and control, early created state schools to replace the earlier religious schools; while the French Revolution enthusiasts abolished the religious school and ordered the substitution of a general system of state schools to serve their national ends.

From these beginnings, as we have seen, the state-school idea has in course of time spread to all continents, and nations everywhere to-day have come to feel that the maintenance of a more or less comprehensive system of state schools is so closely connected with national welfare and progress as to be a necessity for the State (**R.** 367). In consequence, state ministries for education have been created in all the important world nations; state and local school officials have been provided generally to see that the state purpose in creating schools is carried out; state normal schools for the preparation of teachers have been established; comprehensive state school codes have been enacted or educational decrees formulated; and constantly increasing expenditures for education are to-day derived by taxing the wealth of the State to educate the children of the State.

Change from the original purpose. The original purpose in the establishment of schools by the State was everywhere to promote literacy and citizenship. Under all democratic forms of government it was also to insure to the people the elements of learning that they might be prepared for participation in the functions of government. This is well expressed in the quotations given (p. 287) from early American statesmen as to the need for the education of public opinion and the diffusion of knowledge among the people. The same ideas were expressed by French writers and statesmen of the time, and by the English after the passage of the Reform Bills of 1832 and 1867 (p. 347). With the gradual extension of the franchise to larger and larger numbers of the people, the extension of educational advantages naturally had to follow. The education of new citizens for "their political and civil duties as members of society and freemen" became a necessity, and closely followed each extension of the right to vote. In all democratic governments the growing complexity of modern political society has since greatly enlarged these early duties of the school. To-day, in modern nations where general manhood suffrage has come to be the rule, and still more so in nations which have added female suffrage as well, the continually increasing complexity of the political, economic, and social problems upon which the voters are expected to pass judgment is such that a more prolonged period of citizenship education is necessary if voters are to exercise, in any intelligent manner, their functions of citizenship. In nations where the initiative, referendum, and recall have been added, the need for special education along political, economic, and social lines has been still further emphasized.

At first instruction in the common-school branches, with instruction in morals or religion added, was regarded as sufficient. In States, such as the German, where religious instruction was retained in the schools, this has been made a powerful instrument in moulding the citizenship and upholding the established order. The history of the different nations has also been used by each as a means for instilling desired conceptions of citizenship, and some work in more or less formal civil government has usually been added. To-day all these means have been proven inadequate for democratic peoples. In consequence, the work in civil government is being changed and broadened into institutional and community civics; the work of the elementary school is being socialized, along the lines advocated by Dewey; and instruction in economic principles and in the functions of government is being introduced into the secondary schools. Instead of being made *mere teaching* institutions, engaged in promoting literacy and diffusing the rudiments of learning among the electorate, schools are to-day being called upon to grasp the significance of their political and social relationships, and to transform themselves into institutions for improving and advancing the welfare of the State (**R.** 368).

The promotion of nationality. In Prussia the promotion of national solidarity was early made an important aim of the school. This has in time become a common national purpose, as there has dawned upon statesmen generally the idea that a national spirit or culture is "an artificial product which transcends social, religious, and economic distinctions," and that it "could be manufactured by education" (**R.** 340). In consequence of this discovery the school has been raised to a new position of importance in the national life, and has become the chief means for developing in the citizenship that national unity and national strength so desirable under present-day world conditions. In the German States, where this function of the school has in recent times been perverted to carry forward imperialistic national ends (**R.** 342); in France, where it has been intelligently used to promote a rational type of national strength (**R.** 341); in Italy, where divergent racial types are being fused into a new national unity; in Cuba, Porto Rico, and the Philippines (**R.** 343) where the United States has used education to bring backward peoples up to a new level of culture, and to develop in them firm foundations of national solidarity; in China (**R.** 335) where an ancient people, speaking numerous dialects, is making the difficult transition from an old culture to the newer western civilization; and in Algiers and Morocco, where the spirit of French nationality is being fused into dark-skinned tribesmen — everywhere to-day, where public education has really taken hold on the national life, we find the school being used for the promotion of national solidarity and the inculcation of national ideals and national culture. To such an extent has this become true that practically all the pressing problems of the school to-day, in any land, find their ultimate explanation in terms of the new nineteenth-century conceptions of political nationality.

Since the development of world trade routes following long rail and steamship lines, along which people as well as raw materials and manufactured articles pass to and fro, the entrance of new and *diverse* peoples into distant national groups has created a new *problem* of nationalization that before the early nineteenth century was largely unknown. Previous to the nineteenth century the problem was confined almost entirely to peoples conquered and annexed by the fortunes of war. To-day it is a voluntary migration of peoples, and a migration of such proportions and from such distant and unlike civilizations that the problem of assimilating the foreigner has become, particularly in the English-speaking nations and colonies, to which distant and unrelated peoples have turned in largest numbers, a serious national problem. The migration of 32,102,671 persons to the United States, between 1820 and 1914, from all parts of the world, has been a movement of peoples compared with which the migrations of the Germanic tribes — Angles, Saxons, Jutes, Goths, Visigoths, Vandals, Suevi, Danes, Burgundians, Huns — into the old Roman Empire in the fourth and fifth centuries pale into insignificance. No such great movement of peoples was ever known before in history, and the assimilative power of the American nation has not been equal to the task. The World War revealed the extent of the failure to nationalize the foreigner who has been permitted to come, and brought the question of "Americanization" to the front as one of the most pressing problems connected with American national education. With the world in flux racially as it now is, the problem of the assimilation of non-native peoples is one which the schools of every nation which offers political and economic opportunity to other peoples must face. This has called for the organization of special classes in the schools, evening and adult instruction, community-center work, nationalization programs, compulsory attendance of children, state oversight of private and religious schools, and other forms of educational undertakings undreamed of in the days when the State first took over the schools from the Church the better to promote literacy and citizenship.

Effects of the Industrial Revolution. The effects of the great industrial and social changes which we have previously described are written large across the work of the school. As the civilization in the leading world nations has increased in complexity, and the ramifications of the social and industrial life have widened, the school has been called upon to broaden its work, and develop new types of instruction to increase its effectiveness. An education which was entirely satisfactory for the simpler form of social and industrial life of two generations ago has been seen to be *utterly inadequate* for the needs of the present and the future. It is the far-reaching change in social and industrial and home life, brought about by the Industrial Revolution, which underlies most of the pressing problems in educational readjustment to-day. With the ever-increasing subdivision and specialization of labor, the danger from class subdivision has constantly increased, and more and more the school has been called upon to instill into all a political and social consciousness that will lead to unity amid increasing diversity, and to concerted action for the preservation and improvement of the national life.

More education than formerly has also been demanded to enable future citizens to meet intelligently national and personal problems, and with the widening of the suffrage and the spread of democratic ideas there has come a necessary widening of the educational ladder, so that more of the masses of the people may climb. Even in nations having the continental-European two-class school system, larger educational opportunities for the masses have had to be provided. In the more advanced and more democratic nations we also note the establishment of systems of evening schools, adult instruction, university extension, science and art instruction in special centers, the multiplication of libraries, and the increasing use of the lecture, the stereopticon, and the public press, for the purpose of keeping the people informed. No nation has done more to extend the advantages of secondary education to its people than has the United States; France has been especially prominent in adult instruction; England has done noteworthy work with university extension and science and art instruction; while the United States has carried the library movement farther than any other land. All these, again, are extensions of educational opportunity to the masses of the people in a manner undreamed of a century ago.

University expansion. Within the past three quarters of a century, and in many nations within a much shorter period of time, the university has experienced a new manifestation of popular favor, and is to-day looked upon as perhaps the most important part, viewed from the standpoint of the future welfare of the State, of the entire system of public instruction maintained by the State. In it the leaders for the State are trained; in it the thinking which is to dominate government a quarter-century later is largely done; out of it come the creative geniuses whose work, in dozens of fields of human endeavor, will mould the political, social, and scientific future of the nation (R. 369). Every government depending upon a two-class school system must of necessity draw its leaders in the professions, in government, in pure and applied science, and in many other lines from the small but carefully selected classes its universities train. In a democracy, depending entirely upon drawing its future leaders from among the mass, the university becomes an indispensable institution for the training of leaders and for the promotion of the national welfare. In a democratic government one of the highest functions of a university is to educate leaders and to create the standards for democracy.

The university has, accordingly, in all lands, recently experienced a great expansion, and in no country has the development been more rapid than in the United States and Canada. New and important state universities are to-day found in most of the American States and Canadian Provinces, some States maintaining two. These have been relatively recent creations to serve democracy's needs, and upon the support of these state universities large and increasing sums of money are spent annually. In no nation of the world, too, has private benevolence created and endowed so many private universities of high rank as in the United States, and these have fallen into their proper places as auxiliary agents for the promotion of the national welfare in government, science, art, and the learned professions. The university development since the middle of the nineteenth century has been greater than at any period before in world history, and with the spread of democracy, dependent as democracy is upon mass education to obtain its leaders, the university has become "the soul of the State" (**R.** 369). The university development of the next half-century, the world as a whole considered, may possibly surpass anything that we have recently witnessed.

The state school systems as organized. We now find state school systems organized in all the leading world nations. In many the system of public instruction maintained is broad and extensive, beginning often with infant schools or kindergartens, continuing up through elementary schools, middle schools, continuation schools, secondary schools, and normal schools, and culminating in one or more state universities. In addition there are to-day, in many nations, state systems of scientific and technical schools and institutions, and vocational schools and schools for special classes, to which we shall refer more in detail a little further on. The support of all these systems of public instruction to-day comes largely from the direct or indirect taxation of the wealth of the State. Being now conceived of as essential to the welfare and progress of the State, the State yearly confiscates a portion of every man's property and uses it to maintain a service deemed vital to its purposes. The sums spent to-day on education by modern States seem enormous, compared with the sums spent for education under conditions existing a century ago. The rapidly increasing expenditures merely record the changing political conception as to the national importance of enlarging the educational opportunities and advantages of those who are to constitute and direct the future State.

II. SOCIOLOGICAL

A new estimate as to the value of child life. As we saw in chapter XVIII, which described the opportunities for and the kind of schooling developed up to the middle of the eighteenth century, but little of what may be called formal education had been provided up to then for the great mass of children, even in the most progressive nations. We also noted the extreme brutality of the school. Such was the history of childhood, so far as it may be said to have had a history at all, up to the rise of the great humanitarian movement early in the nineteenth century. Neglect, abuse, mutilation, excessive labor, heavy punishments, and often virtual slavery awaited children everywhere up to recent times. The sufferings of childhood at home were added to by others in the school (p. 244) for such as frequented these institutions.

Since about 1850 an entirely new estimate has come to be placed on the importance of national attention to child welfare, though the beginnings of the change date back much earlier. As we have seen (p. 240), England early began to care for the children of its poor. In the Poor-Relief and Apprenticeship Law of 1601 (R. 174) England organized into law the growing practice of a century and laid the basis for much future work of importance. In this legislation, as we have seen, the foundations of the Massachusetts school law of 1642 were laid. In the Virginia laws of 1643 and 1646 (R. 200 a) and the Massachusetts law of 1660, providing for the apprenticeship of orphans and homeless children, the beginnings of child-welfare work in the American Colonies were made.

Many of the Catholic religious orders in Europe had for long cared for and brought up poor and neglected children, and in 1729 the first private orphanage in the new world was established by the Ursuline Order in New Orleans. The first public orphanage in America was established in Charleston, South Carolina, in 1790; the first in England at Birmingham, in 1817; and in 1824 the New York House of Refuge was founded. The latter was the forerunner of the juvenile reformatory institutions established later by practically all of the American States. These have developed chiefly since 1850. To-day most of the American States and governments in many other lands also provide state homes for orphan and neglected children, where they are clothed, fed, cared for, educated, and trained for some useful employment.

Child-labor legislation. One of the best evidences of the new nineteenth-century humanitarianism is to be found in the large amount of child-labor legislation which arose, largely after 1850, and which has been particularly prominent since 1900.

Under the earlier agricultural conditions and the restricted demand for education for ordinary life needs, child labor was not especially harmful, as most of it was out of doors and under reasonably good health conditions. With the coming of the factory system, the rise of cities and the city congestion of population, and other evils connected with the Industrial Revolution, the whole situation was changed. Humanitarians now began to demand legislation to restrict the evils that had arisen. This demand arose earliest in England, and resulted in the earliest legislation there.

The year 1802 is important in the history of child-welfare work for the enactment, by the English Parliament, of the first law to regulate the employment of children in factories. This was known as the Health and Morals of Apprentices Act (**R. 373**). This Act, though largely ineffectual at the time, ordered important reforms which aroused public opinion and which later bore important fruit. By it the employment of work-house orphans was limited; it forbade the labor of children under twelve, for more than twelve hours a day; provided that night labor of children should be discontinued, after 1804; ordered that the children so employed must be taught reading and writing and ciphering, be instructed in religion one hour a week, be taken to church every Sunday, and be given one new suit of clothes a year; ordered separate sleeping apartments for the two sexes, and not over two children to a bed; and provided for the registration and inspection *of factories.* This law represents the beginnings of modern child-labor legislation. It was 1843 before any further child-labor legislation of importance was enacted, and 1878 before a comprehensive child-labor bill was finally passed. In the United States the first laws regulating the employment of children and providing for their school attendance were enacted by Rhode Island in 1840, and Massachusetts in 1842. Factory legislation in other countries has been a product of more recent forces and times.

To-day important child-labor legislation has been enacted by all progressive nations, and the leading world nations have taken advanced ground on the question. All recent thinking is opposed to children engaging in productive labor. With the rise of organized labor, and the extension of the suffrage to the laboring man, he has joined the humanitarians in opposition to his children being permitted to labor. From an economic point of view also, all recent studies have shown the unprofitableness of child labor and the large money-value, under present industrial conditions, of a good education. As a result of much agitation and the spread of popular education, it has at last come to be a generally accepted principle (**R. 374**) that it is better for children and better for society that they should remain in school until they are at least fourteen years of age, and be specially trained for some useful type of work. Now shown to be economically unprofitable, and for long morally indefensible, child labor is now rapidly being superseded by suitable education and the vocational training and guidance of youth in all progressive nations.

Compulsory school-attendance legislation. The natural corollary of the taxation of the wealth of the State to educate the children of the State, and the prohibition of children to labor, is the compulsion of children to attend school that they may receive the instruction and training which the State has deemed it wise to tax its citizens to provide.

Except in the German States, compulsory education is a relatively recent idea, though in its origins it is a child of the Protestant Reformation theory as to education for salvation. In German lands the compulsory-attendance idea took deep root, and in consequence the Germans were the first important modern nation to enforce, thoroughly, the education of all. By the middle of the eighteenth century the basis was clearly laid in Prussia for that enforcement of the compulsion to attend schools which, by the middle of the nineteenth century, had become such a notable characteristic of all German education. The same compulsory idea early took deep root among the Scandinavian peoples. In consequence the lowest illiteracy in Europe, at the beginning of the nineteenth century, was to be found (see map, p. 397) among the Finns, Swedes, Norwegians, Danes, and Germans.

The compulsory-attendance idea died out in America, in the Netherlands, and in part in Scotland. In England and in the Anglican Colonies in America it never took root. In France the idea awaited the work of the National Convention, which (1792) ordered three years of education compulsory for all. War and the lack of interest of Napoleon in primary education caused the requirement, however, to become a dead letter. The Law of 1833 provided for but did not enforce it, and real compulsory education in France did not come until 1882. In England the compulsory idea received but little attention until after 1870, met with much opposition, and only recently have comprehensive reforms been provided. In the United States the new beginnings of compulsory-attendance legislation date from the Rhode Island child-labor law of 1840, and the first modern compulsory-attendance law enacted by Massachusetts, in 1852. By 1885, fourteen American States and six Territories had enacted some form of compulsory-attendance law. Since 1900 there has been a general revision of American state legislation on the subject, with a view to increasing and the better enforcement of the compulsory-attendance requirements, and with a general demand that the National Congress should enact a national child-labor law.

As a result of this legislation the labor of young children has been greatly restricted; work in many industries has been prohibited entirely, because of the danger to life and health; compulsory education has been extended in a majority of the American States to cover the full school year; poverty, or dependent parents, in many States no longer serves as an excuse for non-attendance; often those having physical or mental defects also are included in the compulsion to attend, if their wants can be provided for; the school census has been changed so as to aid in the location of children of compulsory school-attendance age; and special officers have been authorized or ordered appointed to assist school authorities in enforcing the compulsory-attendance and child-labor laws. Having taxed their citizens to provide schools, the different States now require children to attend and partake of the advantages provided. The schools, too, have made a close study *of retarded pupils,* because of the close connection found to exist between retardation in school and truancy and juvenile delinquency.

The education of defectives. Another nineteenth-century expansion of state education has come in the provision now generally made for the education of defectives. To-day the state school systems of Christian nations generally make some provision for state institutional care, and often for local classes as well, for the training of children who belong to the seriously defective classes of society. This work is almost entirely a product of the new humanitarianism of modern times. Excepting the education of the deaf, seriously begun a little earlier, all effective work dates from the first half of the nineteenth century. At first the feasibility of all such instruction was doubted, and the work generally was commenced privately. Out of successes thus achieved, public institutions have been built up to carry on, on a large scale, what was begun privately on a small scale. It is now felt to be better for the State, as well as for the unfortunates themselves, that they be cared for and educated, as suitably and well as possible, for self-respect, self-support, and some form of social and vocational usefulness. In consequence, the compulsory-attendance laws of the leading world States to-day require that defectives, between certain ages at least, be sent to a state institution or be enrolled in a public-school class specialized for their training.

FIG. 100. REV. THOMAS H. GALLAUDET TEACHING THE DEAF AND DUMB

From a bas-relief on the monument of Gallaudet, erected by the deaf and dumb of the United States, in the grounds of the American Asylum, at Hartford, Connecticut.

Dependents, orphans, children of soldiers and sailors, and incorrigibles of various classes represent others for whom modern States have now provided special state institutions. To-day a modern State finds it necessary to provide a number of such specialized institutions, or to make arrangements with neighboring States for the care of its dependents, if it is to meet what have come to be recognized as its humanitarian educational duties.

Public playgrounds and play directors, vacation schools, juvenile courts, disciplinary classes, parental schools, classes for mothers, visiting home-teachers and nurses, and child-welfare societies and officers, are other means for caring for child life and child welfare which have all been begun within the past half-century. The significance of these additions lies chiefly in that the history of the attitude of nations toward their child life is the history of the rise of humanitarianism, altruism, justice, order, morality, and civilization itself.

The education of superior children. All the work described above and relating to the work of defectives, delinquents, and children for some reason in need of special attention and care has been for those who represent the less capable and on the whole less useful members of society — the ones from whom society may expect the least. They are at the same time the most costly wards of the State.

Wholly within the second decade of the present century, and largely as a result of the work of the French psychologist Alfred Binet (1857–1911) we are now able to sort out, for special attention, a new class of what are known as superior, or gifted children, and to the education of these special attention is to-day here and there beginning to be directed. Educationally, it is an attempt to do for democratic forms of national organization what a two-class school system does for monarchical forms, but to select intellectual capacity from the whole mass of the people, rather than from a selected class or caste. We know now that the number of children of superior ability is approximately as large as the number of the feeble in mind, and also that the future of democratic governments hinges largely upon the proper education and utilization of these superior children. One child of superior intellectual capacity, educated so as to utilize his talents, may confer greater benefits upon mankind, and be educationally far more important, than a thousand of the feeble-minded children upon whom we have recently come to put so much educational effort and expense. Questions relating to the training of leaders for democracy's service attain new significance in terms of the recent ability to measure and grade intelligence, as also do questions relating to grading, classification in school, choice of studies, rate of advancement, and the vocational guidance of children in school.

The new interest in health. Another new expansion of the educational service which has come in since the middle of the nineteenth century, and which has recently grown to be one of large significance, is work in the medical inspection of schools, the supervision of the health of pupils, and the new instruction in preventive hygiene. This is a product of the scientific and social and industrial revolutions which the nineteenth century brought, rather than of humanitarian influences, and represents an application of newly discovered scientific knowledge to health work among children. Its basis is economic, though its results are largely physical and educational and social (**R. 375**).

Net Average Worth of a Person

Age	*Worth*
0	$90
5	950
10	2000
20	4000
30	4100
40	3050
50	2900
60	1650
70	15
80	−700

(Calculations by Dr. William Farr, formerly Registrar of Vital Statistics for Great Britain. Based on pre-war values)

The discovery and isolation of bacteria; the vast amount of new knowledge which has come to us as to the transmission and possibilities for the elimination of many diseases; the spread of information as to sanitary science and preventive medicine; the change in emphasis in medical practice, from curative to preventive and remedial; the closer crowding together of all classes of people in cities; the change of habits for many from life in the open to life in the factory, shop, and apartment; and the growing realization of the economic value to the nation of its manhood and womanhood; have all alike combined with modern humanitarianism and applied Christianity to make progressive nations take a new interest in child health and proper child development. European nations have so far done much more in school health work than has the United States, though a very commendable beginning has been made here.

Medical inspection and health supervision. Medical inspection of schools began in France, in 1837, though genuine medical inspection, in a modern sense, was not begun in France until 1879. The pioneer country for real work was Sweden, where health officers were assigned to each large school as early as 1868. Norway made such appointments optional in 1885, and obligatory in 1891. Belgium began the work in 1874. Tests of eyesight were begun in Dresden in 1867. Frankfort-on-Main appointed the first German school physician in 1888. England first employed school nurses in 1887; and, in 1907, following the revelations as to low physical vitality growing out of the Boer War, adopted a mandatory medical-inspection and health-development act applying to England and Wales, and the year following Scotland did the same. Argentine and Chili both instituted such service in 1888, and Japan made medical inspection compulsory and universal in 1898.

In the United States the work was begun voluntarily in Boston, in 1894, following a series of epidemics. Chicago organized medical inspection in 1895, New York City in 1897, and Philadelphia in 1898. From these larger cities the idea spread to the smaller ones, at first slowly, and then very rapidly. The first school nurse in the United States was employed in New York City, in 1902, and the idea at once proved to be of great value. In 1906 Massachusetts adopted the first state medical inspection law. In 1912 Minnesota organized the first "State Division of Health Supervision of Schools" in the United States, and this plan has since been followed by other States.

From mere medical inspection to detect contagious diseases, in which the movement everywhere began, it was next extended to tests for eyesight and hearing, to be made by teachers or physicians, and has since been enlarged to include physical examinations to detect hidden diseases and a constructive health-program for the schools. The work has now come to include eye, ear, nose, throat, and teeth, as well as general physical examinations; the supervision of the teaching of hygiene in the schools, and to a certain extent the physical training and playground activities; and a constructive program for the development of the health and physical welfare of all children. All this represents a further extension of the public-education idea.

These represent some of the more important new problems in education which have come to challenge us since the school was taken over from the Church and transformed into the great constructive tool of the State. Their solution will call for careful investigation, experimentation, and much clear thinking, and before they are solved other new problems will arise. So probably it will ever be under a democratic form of government; only in autocratic or strongly monarchical forms of government, where the study of problems of educational organization and adjustment are not looked upon with favor, can a school system to-day remain for long fixed in type or uniform in character. Education *to-day has* become intricate and difficult, requiring careful professional training on the part of those who would exercise intelligent control, and so intimately connected with national strength and national welfare that it may be truthfully said to have become, in many respects, the most important constructive undertaking of a modern State.

QUESTIONS FOR DISCUSSION

1. Show that education must be extended and increased in efficiency in proportion as the suffrage is extended, and additional political functions given to the electorate. Illustrate.
2. Trace the changes in the character of the instruction given in the schools, paralleling such changes.
3. Explain the difference in use of the schools for nationality ends in Germany and France.
4. Of what is the recent development of evening, adult, and extension education an index?
5. Show why university education is more important in national life to-day than ever before in history.
6. Explain the reasons for the new conceptions as to the value of child life which have come within the past hundred years, in all advanced nations. Why not in the less advanced nations?
7. Show the relation between the breakdown of the apprentice system, the Industrial Revolution, and the rise of compulsory school attendance.
8. Show that compulsory school attendance is a natural corollary to general taxation for education.
9. How do you account for the relatively recent interest in the education of defectives and delinquents? Of what is this interest an expression?
10. Does the obligation assumed to educate involve any greater exercise of state authority or recognition of duty than the advancement of the health of the people and the sanitary welfare of the State?

SELECTED READINGS

In the accompanying *Book of Readings* the following selections illustrative of the contents of this chapter are reproduced:

367. McKechnie, W. S.: The Environmental Influence of the State.
368. Emperor William II.: German Secondary Schools and National Ends.
369. Van Hise, Chas. R.: The University and the State.
370. Friend: What the Folk High Schools have done for Denmark.
371. U.S. Commission: The German System of Vocational Education.
372. U.S. Commission: Vocational Education and National Prosperity.
373. DeMontmorency: English Conditions before the First Factory-Labor Act.
374. Giddings, F. R.: The New Problem of Child Labor.
375. Hoag, E. B., and Terman, L. M.: Health Work in the Schools.

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*_Commission on National Aid to Vocational Education, Report_, vol. 1. (Document 1004, H. R., 63d Congress, 2d session, Washington, 1914.)
Cook, W. A. "A Brief Survey of the Development of Compulsory Education in the United States"; in _Elementary School Teacher_, vol. 12, pp. 331–35. (March, 1912.)
*Dean, A. D. _The Worker and the State._
Eliot, C. W. _Education for Efficiency._
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Friend, L. L. _The Folk High Schools of Denmark._ (Bulletin No. 3, 1914, United States Bureau of Education.)
*Hoag, E. B., and Terman, L. M. _Health Work in the Schools._
Kandel, I. L. "The Junior High School in European Systems"; in _Educational Review_, vol. 58, pp. 305–29. (Nov. 1919.)
*Munroe, J. P. _New Demands in Education._
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Ware, Fabian. _Educational Foundations of Trade and Industry._

CONCLUSION; THE FUTURE

We have now reached the end of the story of the rise and progress of man's conscious effort to improve himself and advance the welfare of his group by means of education. To one who has followed the narrative thus far it must be evident how fully this conscious effort has paralleled the history of the rise and progress of western civilization itself. Beginning first among the Greeks — the first people in history to be "smitten with the passion for truth," the first possessing sufficient courage to put faith in reason, and the first to attempt to reconcile the claims of the State and the individual and to work out a plan of "ordered liberty" — a new spirit was born and in time passed on to the western world. As Butcher well says (**R. 11**), "the Greek genius is the European genius in its first and brightest bloom, and from a vivifying contact with the Greek spirit Europe derived that new and mighty impulse which we call Progress." Hellenizing first the Eastern Mediterranean, and then taking captive her rude conqueror, the Hellenization of the Roman and early Christian world was the result.

Then followed the reaction under early Christian rule, and the fearful deluge of barbarism which for centuries well-nigh extinguished both the ancient learning and the new spirit. Finally, after the long mediæval night, came "time's burst of dawn," first and for a long time confined to Italy, but later extending to all northern lands, and in the century of revival and rediscovery and reconstruction the Greek passion for truth and the Greek courage to trust reason were reawakened, and once more made the heritage of the western world. Once again the Greek spirit, the spirit of freedom and progress and trust in the power of truth, became the impulse that was to guide and dominate the future. To follow reason without fear of consequences, to substitute scientific for empirical knowledge, to equip men for intelligent participation in civic life, to discover a rational basis for conduct, to unfold and expand every inborn faculty and energy, and to fill man with a restless striving after an ideal — these essentially Greek characteristics in time came to be accepted by an increasing number of *modern men,* as they had been by the thoughtful men of the *ancient Greek* world, as the law and goal of human endeavor. From this point on the intellectual progress of the western world was certain, though at times the rate seems painfully slow.

The great events which stand out in modern history — milestones, as it were, along the road of the intellectual progress of mankind in the recovery of the Greek spirit — were the revival of the ancient learning, the Protestant appeal to reason, the recovery and vast extension of the old scientific knowledge, the assertion of the rights of the individual as opposed to the rights of the State, and the growth of a new humanitarianism, induced by the teachings of Christianity, which has softened old laws and awakened a new conception of the value of child and human life. Out of these great historic movements have come modern scholarship, the inestimable boon of religious liberty, the firm establishment of the idea of the reign of law in an orderly universe, the conception of government as in the interests of the governed, the substitution of democracy and political equality for the rule of a class or an autocratic power, and the assertion of the right to an education at public expense as a birthright of every child. The common school, the education of all, equality of rights and opportunity, full and equal suffrage, the responsibility of all for the advancement of the common welfare, and liberty under law have been the natural consequences and the outcome of these great struggles to set free and quicken the human spirit.

The Peace of Westphalia (1648), which marked the close of a century of effort to crush human reason and religious liberty with violence and oppression, marked a turning-point in the history of the world. Though religious intolerance and bigotry might still persist in places for centuries to come, this Peace acknowledged the futility of persecution to stamp out human inquiry, and marked the downfall of intellectual mediævalism. The work of the political philosophers of the eighteenth century, the establishment of a new political ideal by the leaders of the American Revolution, and the drastic sweeping-away of ancient abuses in Church and State in the Revolution in France, applied a new spirit to government, ushered in the rule of the common man, and began the establishment of democracy as the ruling form of government for mankind. The recent World War in Europe was in a sense a sequel to what had gone before. One result of its outcome, despite certain reactionary but temporary old-type governments that the near future may see set up in places, has been *the elimination* of the mediæval theory of the "divine right of kings" from the continent of Europe, and the establishment of the democratic type of government as the ruling type of the future. Some of the nations, such as Poland and Jugo-Slavia, for a time will be in a sense experimental, and even well-governed Germany must learn new forms and ways, but in time government of and by and for the people is practically certain to become established everywhere on the continent of Europe.

Still more, the outcome of the World War would seem to indicate that democratic forms of government are destined in time to extend to peoples everywhere who have the capacity for using them. The great problem of the coming century, then, and perhaps even of succeeding centuries, will be to make democracy a safe form of government for the world. This can be done only by a far more general extension of educational opportunities and advantages than the world has as yet witnessed. In the hands of an uneducated proletariat democracy is a dangerous instrument. In Russia, Mexico, and in certain of the Central American Republics we see what a democracy results in in the hands of an uneducated people. There, too often, the revolver instead of the ballot box is used to settle public issues, and instead of orderly government under law we have a reign of injustice and anarchy. Only by the slow but sure means of general education of the masses in character and in the fundamental bases of liberty under law can governments that are safe and intelligent be created. In a far larger sense than anything we have as yet witnessed, education must become the constructive tool for national progress.

The great needs of the modern world call for the general diffusion among the masses of mankind of the intellectual and spiritual and political gains of the centuries, which are as yet, despite the great recent progress made in extending general education, the possession of but a relatively small number of the world's population. Among the more important of these are the religious spirit, coupled with full religious liberty and tolerance; a clear recognition of the rights of minorities, so long as they do not impair the advancement of the general welfare; the general diffusion of a knowledge of the more common truths and applications of science, particularly as these relate to personal hygiene, sanitation, agriculture, and modern industrial processes; the general education of all, not only in the tools of knowledge, but in those fundamental principles of self-government which lie at the basis of democratic life; training in character, self-control, and in the ability to assume and carry responsibility; the instilling into a constantly widening circle of mankind the importance of fidelity to duty, truth, honor, and virtue; the emphasis of the many duties and responsibilities which encompass all in the complex modern world, rather than the eighteenth-century individualistic conception of political and personal rights; the clear distinction between liberty and license; and the conception of liberty guided by law. In addition, each man and woman should be educated for personal efficiency in some vocation or form of service in which each can best realize his personal possibilities, and at the same time render the largest service to that society of which he forms a part.

The great needs of the modern world also call for that form of education and training which will not merely impart literacy and prepare for economic competence and national citizenship, but which will give to national groups a new conception of national character and international morality and create new standards of value for human effort. National character and international morality are always the outgrowth of the personality of a people, and this in turn calls for the inculcation of humane ideals, the proper discipline of the instincts, the training of a will to do right, good physical vigor, and, to a large degree, the development of individual efficiency and economic competence. Moral and religious instruction, as it has been given, will not suffice, because it does not reach the heart of the problem. No nation has shown more completely the utter futility of religious instruction to produce morality than has Germany, where the instruction of all in the principles of religion has been required for centuries.

The problem of the twentieth century, then, and probably of other centuries to come, is how the constructive forces in modern society, of which the schools of nations should stand first, can best direct their efforts to influence and direct the deeper sources of the life of a people, so that the national characteristics it is desired to display to the world will be developed because the schools have instilled into every child these national ideals. Many forces must coöperate in such a task, but unless the schools of nations become clearly conscious of national needs and of international purposes, become inspired by an ideal of service for the welfare of mankind, substitute among national groups competition in the things of the spirit — art, architecture, music, sports, education, letters, sanitation, housing, public works, and such *applications of* science as minister to health and happiness — for

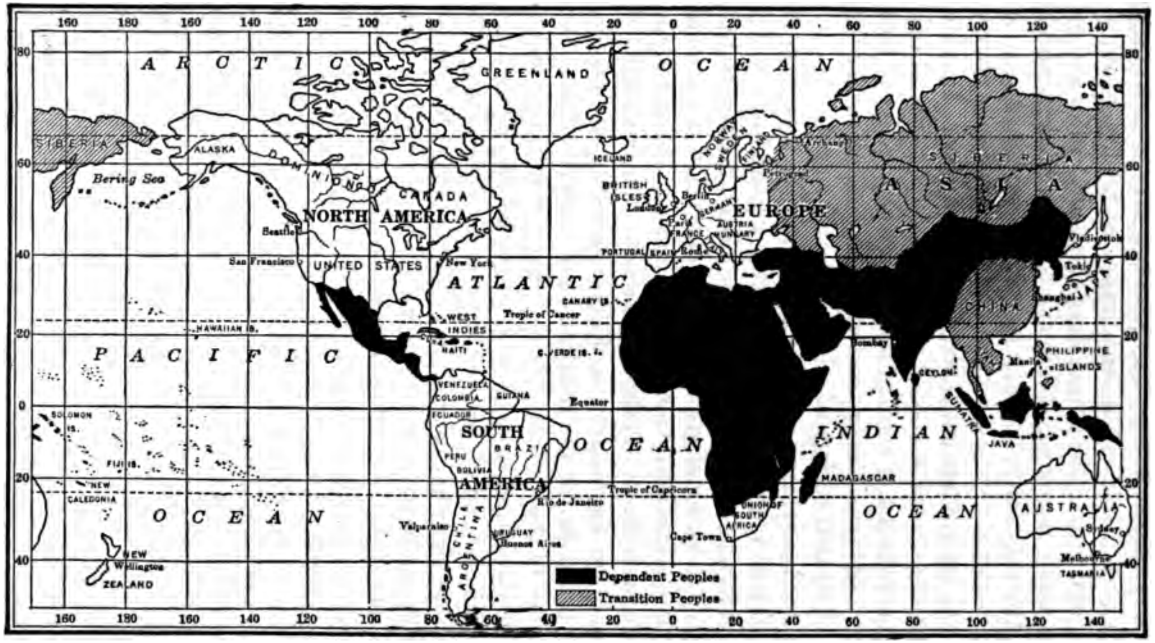

FIG. 101 THE EDUCATIONAL PROBLEMS OF THE FUTURE

Transition peoples are shaded; dependent and backward peoples black. The "mandatories" of the "League of Nations" will be in the black areas, and will have to be carried by the nations which have made the most progress in civilization and shown the highest sense of responsibility for the welfare of peoples that have come under their care. The black areas reveal "The White Man's Burden" of the future.

competition in the creation of material wealth, the piling-up of armaments, the extension of national boundaries, and the present *overemphasis* of a narrow nationalism, and direct the energies of *coming* generations to the carrying-out of this new and larger human service, nations must inevitably fail to reach the world position they might otherwise have occupied, destructive international competition and warfare will continue, and the advancement of world civilization and international well-being will be greatly retarded thereby.

In this work of advancing world civilization, the nations which have long been in the forefront of progress must expect to assume important rôles. It is their peculiar mission — for long clearly recognized by Great Britain and France in their political relations with inferior and backward peoples; by the United States in its excellent work in Cuba, Porto Rico, and the Philippines; and clearly formulated in the system of "mandatories" under the League of Nations — to help backward peoples to advance, and to assist them in lifting themselves to a higher plane of world civilization. In doing this a very practical type of education must naturally play the leading part, and time, probably much time, will be required to achieve any large results. Disregarding the large need for such service among the leading world nations, the map reproduced opposite reveals how much of such work still remains to be done in the world as a whole. "The White Man's Burden" truly is large, and the larger world tasks of the twentieth century for the more advanced nations will be to help other peoples, in distant and more backward lands, slowly to educate themselves in the difficult art of self-government, gradually establish stable and democratic governments of their own, and in time to take their places among the enlightened and responsible peoples of the earth.

At the bottom of all this work and service lies the new human-liberty conceptions first worked out and formulated for the world by little Greece. In time the ideas to which they gave expression have become the heritage of what we know as our western civilization, and the warp and woof of the intellectual and political life of the modern world. As a result of the Industrial Revolution, and of the new political and commercial and social forces of our time, this western civilization, using education as its great constructive tool, is now spreading to every continent on the globe. The task of succeeding centuries will be to carry forward and extend what has been so well begun; to level up the peoples of the earth, as far as inherent differences in capacity will permit; and to extend, through educative influences, the principles and practices of a *Christian civilization* to all. In establishing intelligent and interested government, and in moulding and shaping the destinies of peoples, general education has become the great constructive tool of modern civilization. A hundred and fifty years ago education was of but little importance, being primarily an instrument of the Church and used for church ends. To-day general education is an instrument of government, and is rightfully regarded as a prime essential to good government and national progress. With the spread of the democratic type the importance of the school is enhanced, its control by the State becomes essential, its continued expansion to include new types of schools and new forms of educational opportunities and service a necessity, the study of its organization and administration and problems becomes a necessary function of government, while the training it can give is dignified and made the birthright of every boy and girl.

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